

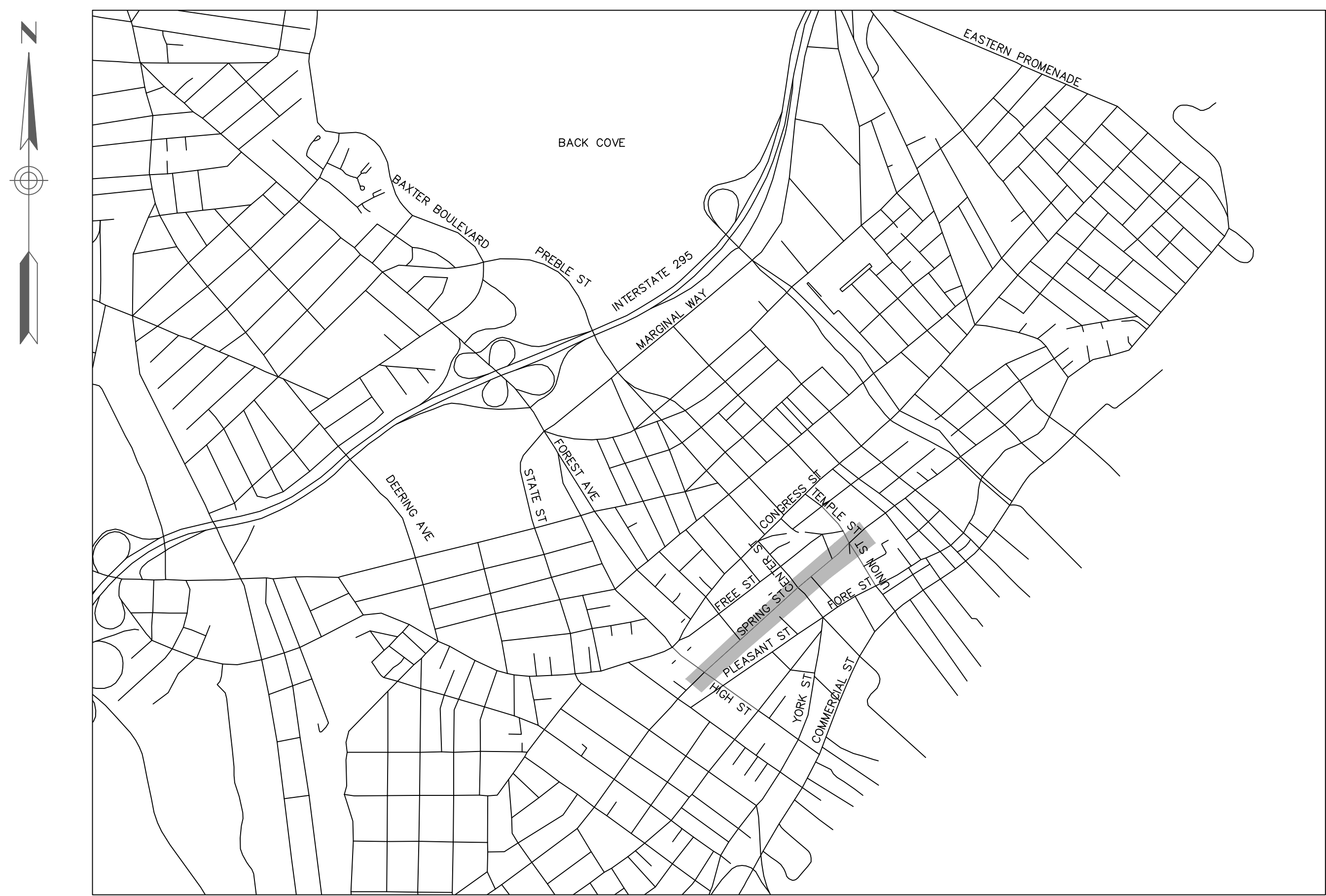
CITY OF PORTLAND

PUBLIC SERVICES DEPARTMENT

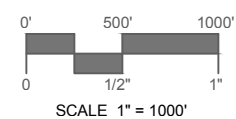


SPRING STREET RECONSTRUCTION PROJECT

MaineDOT WIN 20256.00
APRIL 29, 2015



SITE LOCATION MAP



LIST OF DRAWINGS

SHEET No.	DRAWING No.	TITLE
1		TITLE SHEET
2	QNTY	ESTIMATED QUANTITIES
3	BCL	BASELINE CONSTRUCTION LAYOUT & INDEX
4	LGND	LEGEND & NOTES
5-6	CN-1 TO CN-2	CONSTRUCTION NOTES
7-10	D-1 TO D-4	DETAILS
11	TYP-1	TYPICAL SECTIONS
12-16	EX-1 TO EX-5	EXISTING CONDITIONS & REMOVALS PLAN
17-21	PLN-1 TO PLN-5	ROADWAY PLANS
22-26	CRB-1 TO CRB-5	CURB LAYOUT PLAN
27-31	PM-1 TO PM-5	PAVEMENT MARKING PLAN
32-35	TRA-1 TO TRA-4	TRAFFIC PLAN

ESTIMATED QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
202.202	REMOVE PAVEMENT SURFACE	SY	17826
203.20	COMMON EXCAVATION	CY	2265
304.10	AGGREGATE SUBBASE COURSE GRAVEL (TYPE D)	CY	1762
304.15	AGGREGATE BASE COURSE – TYPE B	CY	652
403.208	HOT MIX ASPHALT 12.5MM NOMINAL MAXIMUM SIZE	TON	773
403.209	HOT MIX ASPAHLT 9.5MM NOMINAL MAXIMUM SIZE (INCIDENTALS)	TON	127
403.210	HOT MIX ASPHALT 9.5MM NOMINAL MAXIMUM SIZE	TON	1540
409.15	BITUMINOUS TACK COAT, APPLIED	G	1518
603.15	12 INCH CULVERT PIPE OPTION 1	LF	119
604.092	CATCH BASIN TYPE B1–C	EA	5
604.16	ALTERING CATCH BASIN TO MANHOLE	EA	7
604.18	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	EA	1
608.15	BRICK SIDEWALK WITH BITUMINOUS BASE	SY	1285
608.26	CURB RAMP DETECTABLE WARNING FIELD	SF	272
609.11	VERTICAL CURB TYPE 1	LF	1086
609.12	VERTICAL CURB TYPE 1 CIRCULAR	LF	463
609.238	TERMINAL CURB TYPE 1 – 8 FT	EA	25
609.2381	TERMINAL CURB TYPE 1 – 8 FT CIRCULAR	EA	31
615.07	LOAM	CY	168
618.13	SEEDING METHOD NUMBER 1	UNIT	12
619.12	MULCH	UNIT	12
626.11	PRECAST CONCRETE JUNCTION BOX	EA	15
626.21	METALLIC CONDUIT	LF	90
626.22	NON–METALLIC CONDUIT	LF	945
626.31	18” DIAMETER FOUNDATION	EA	8
626.32	24” DIAMETER FOUNDATION	EA	7
626.332	30” DIAMETER FOUNDATION, 8’ OR GREATER	EA	6
626.35	CONTROLLER CABINET FOUNDATION	EA	1
627.733	4” WHITE OR YELLOW PAVEMENT MARKING LINE	LF	11152
627.744	6” WHITE OR YELLOW PAVEMENT MARKING LINE	LF	6400
627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	SF	6830
627.78	TEMPORARY PAVEMENT MARKING LINE WHITE OR YELLOW	LF	15141
629.05	HAND LABOR, STRAIGHT TIME	HR	20
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	HR	10
631.15	ROLLER, EARTH AND BASE (INCLUDING OPERATOR)	HR	20
631.172	TRUCK–LARGE (INCLUDING OPERATOR)	HR	20
641.30	EXTERIOR PLANTER (FIXED)	EA	5
643.71	TRAFFIC SIGNAL MODIFICATION AT SPRING ST AT CENTER ST	LS	1
643.71	TRAFFIC SIGNAL MODIFICATION AT SPRING/TEMPLE/UNION/MIDDLE ST	LS	1
643.71	TRAFFIC SIGNAL AT SPRING ST AT HIGH ST	LS	1
643.83	VIDEO (THERMAL) DETECTION SYSTEM 3–WAY AT SPRING AT HIGH	LS	1
643.83	VIDEO (THERMAL) DETECTION SYSTEM 4–WAY AT SPRING AT CENTER	LS	1
645.106	DEMOUNT REGULATORY, WARNING, CONFIRMATION, RTE SIGNS	EA	18
645.271	REG, WARNING, CONFIRMATION, RTE SIGNS TYPE I	SF	58

ESTIMATED QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
652.33	DRUM	EA	120
652.34	CONE	EA	120
652.35	CONSTRUCTION SIGNS	SF	410
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	CD	120
652.38	FLAGGERS	HR	2400
652.38	TRAFFIC OFFICERS	HR	120
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LS	1
659.10	MOBILIZATION	LS	1
827.362	GAS MAIN TRENCHING	LF	2310

DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
N/A

DATE:
APRIL 29, 2015

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 098
Professional Engineer

SPRING STREET
RECONSTRUCTION PROJECT
ESTIMATED QUANTITIES

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

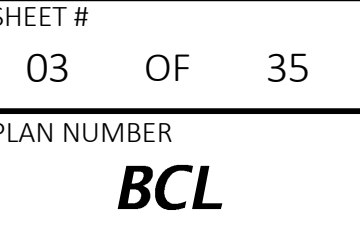
SEAL OF THE CITY OF PORTLAND, MAINE

SHEET #
02 OF 35

PLAN NUMBER
QNTY

MILONE & MACBROOM®
100 Commercial Street
Suite 417
Portland, Maine 04101
(207) 541-9544 Fax (207) 541-9548
www.miloneandmacbroom.com

REFERENCES:
Cul 3D 2014 Drawing Name:
SpringSt_Quantities_2014.dwg



203.20 COMMON EXCAVATION

BOX CUT AREA BETWEEN EXISTING CONCRETE BARRIERS BELOW ROAD SURFACE GRADE

STATION	TO	STATION
13+19	TO	13+88
14+52	TO	16+20
16+70	TO	21+66
21+98	TO	22+20
22+53	TO	27+25
27+95	TO	32+51
32+70	TO	34+45
35+38	TO	37+75

PAVEMENT AND GRAVEL REMOVAL FOR CURB EXTENSIONS AND NEW LAWN AREAS

STATION	TO	STATION
13+55 LT	TO	13+95 LT
13+83 RT	TO	14+08 RT
14+54 RT	TO	15+64 RT
14+36 LT	TO	14+66 LT
16+83 LT	TO	18+12 LT
18+97 RT	TO	19+75 RT
18+86 LT	TO	19+87 LT
22+44 RT	TO	23+48 RT
22+57 LT	TO	24+04 LT
26+63 RT	TO	27+47 RT
26+72 LT	TO	27+35 LT
27+74 LT	TO	28+39 LT
27+78 RT	TO	28+46 RT
31+70 RT	TO	32+49 RT
31+77 LT	TO	32+38 LT
32+71 LT	TO	34+66 LT
33+97 RT	TO	34+36 RT
35+18 LT	TO	35+67 LT
34+78 RT	TO	35+42 RT

GAS MAIN TRENCHING OUTSIDE OF MEDIAN AREAS

STATION	TO	STATION
13+01	TO	13+20
13+85	TO	14+55
16+19	TO	16+70
18+83		
20+30		
21+37		
21+66	TO	22+54
27+25	TO	28+09
32+25	TO	32+35

304.10 AGGREGATE SUB-BASE COURSE – GRAVEL

MEDIAN AREA OF SPRING STREET

STATION	TO	STATION
13+19	TO	13+88
14+52	TO	16+20
16+70	TO	21+66
21+98	TO	22+20
22+53	TO	27+25
27+95	TO	32+51
32+70	TO	34+45
35+38	TO	37+75

THIS ITEM ALSO INCLUDES TRENCHES FOR GAS MAIN OUTSIDE OF MEDIAN, CONDUIT FOR TRAFFIC SIGNALS, TYPE-1 CURB INSTALLATION, AND CATCH BASIN INSTALLATION

304.15 AGGREGATE BASE COURSE – TYPE B

MEDIAN AREA OF SPRING STREET

STATION	TO	STATION
13+19	TO	13+88
14+52	TO	16+20
16+70	TO	21+66
21+98	TO	22+20
22+53	TO	27+25
27+95	TO	32+51
32+70	TO	34+45
35+38	TO	37+75

NEW BRICK SIDEWALK CONSTRUCTION

STATION	TO	STATION
13+55 LT	TO	13+95 LT
13+84 RT	TO	14+08 RT
14+54 RT	TO	14+81 RT
14+36 LT	TO	14+67 LT
19+19 LT	TO	19+43 LT
19+27 RT	TO	19+43 RT
22+76 LT	TO	24+14 LT
22+76 RT	TO	22+92 RT
26+72 LT	TO	27+36 LT
27+05 RT	TO	27+47 RT
27+74 LT	TO	28+04 LT
27+78 RT	TO	28+07 RT
32+07 LT	TO	32+38 LT
32+07 RT	TO	32+26 RT
33+97 RT	TO	34+36 RT
34+18 LT	TO	34+67 LT
34+79 RT	TO	35+24 RT
35+17 LT	TO	35+67 LT

THIS ITEM ALSO INCLUDES TRENCHES FOR GAS MAIN OUTSIDE OF MEDIAN, CONDUIT FOR TRAFFIC SIGNALS AND CATCH BASIN INSTALLATION

403.208 HOT MIX ASPHALT 12.5mm NOMINAL MAXIMUM SIZE

PAVING AREA OF MEDIAN REMOVAL IN SPRING STREET

STATION	TO	STATION
13+19	TO	13+88
14+52	TO	16+20
16+70	TO	21+66
21+98	TO	22+20
22+53	TO	27+25
27+95	TO	32+51
32+70	TO	34+45
35+38	TO	37+75

THIS ITEM ALSO INCLUDES ALTERING CATCH BASIN TO MANHOLE, ADJUSTING MANHOLE OR CATCH BASIN TO GRADE, SETTING NEW TYPE-1 CURB (12.5mm HMA HAND PLACED), PAVING OF TRENCH AREAS (12.5mm HMA HAND PLACED)

403.209 HOT MIX ASPHALT 9.5mm NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)

NEW BRICK SIDEWALK CONSTRUCTION

STATION	TO	STATION
13+55 LT	TO	13+95 LT
19+19 LT	TO	19+43 LT
19+27 RT	TO	19+44 RT
22+74 LT	TO	24+15 LT
22+76 RT	TO	22+93 RT
26+71 LT	TO	27+36 LT
27+05 RT	TO	27+50 RT
27+77 LT	TO	66+68 LT
27+77 RT	TO	28+04 RT
32+07 LT	TO	32+38 LT
32+07 RT	TO	32+26 RT
32+70 LT	TO	32+86 LT
34+14 LT	TO	34+66 LT
33+96 RT	TO	34+36 RT
35+17 LT	TO	35+66 LT
34+78 RT	TO	35+23 RT

403.210 HOT MIX ASPHALT 9.5mm NOMINAL MAXIMUM SIZE

FINAL SURFACE PAVING OF SPRING STREET

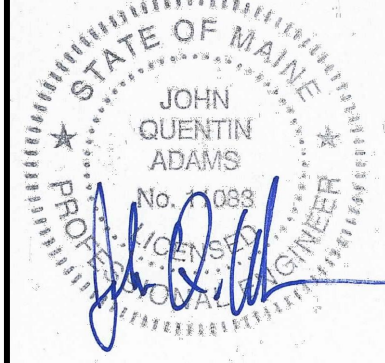
STATION	TO	STATION
12+94	TO	37+86

THIS ITEM ALSO INCLUDES SIDE ROADS AND DRIVEWAYS UP TO THE IDENTIFIED LIMITS OF MILLING.

403.210 BITUMINOUS TACK COAT, APPLIED

STATION	TO	STATION
12+94	TO	37+86

THIS ITEM ALSO INCLUDES SIDE ROADS AND DRIVEWAYS UP TO THE IDENTIFIED LIMITS OF MILLING.



603.15 12 INCH CULVERT PIPE OPTION 1

STATION	TO	STATION
22+57 LT	TO	22+73 LT
22+43 RT	TO	22+69 RT
26+71 LT	TO	27+07 LT
26+61 RT	TO	27+08 RT

604.092 CATCH BASIN TYPE B1–C

NO.	STATION	OFFSET
CB-1	22+57	31' LT
CB-2	22+43	26' RT
CB-3	26+71	35' LT
CB-4	26+61	27' RT
CB-5	33+93	25' LT

604.16 ALTERING CATCH BASIN TO MANHOLE

STATION	OFFSET
22+69	24' RT
22+74	35' LT
27+07	34' LT
27+09	27' RT
33+43	38' LT
33+93	40' LT
35+46	3' LT

604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE

STATION	OFFSET
13+82	28' LT

608.15 BRICK SIDEWALK WITH BITUMINOUS BASE

STATION	TO	STATION
13+55 LT	TO	13+95 LT
13+84 RT	TO	14+08 RT
14+54 RT	TO	14+81 RT
14+36 LT	TO	14+67 LT
19+19 LT	TO	19+43 LT
19+27 RT	TO	19+43 RT
22+76 LT	TO	24+14 LT
22+76 RT	TO	22+92 RT
26+72 LT	TO	27+36 LT
27+05 RT	TO	27+47 RT
27+74 LT	TO	28+04 LT
27+78 RT	TO	28+07 RT
32+07 LT	TO	32+38 LT
32+07 RT	TO	32+26 RT
33+97 RT	TO	34+36 RT
34+18 LT	TO	34+67 LT
34+79 RT	TO	35+24 RT
35+17 LT	TO	35+67 LT

608.26 CURB RAMP DETECTABLE WARNING FIELD

STATION	OFFSET
13+87	48' LT
13+88	16' LT
14+00	29' RT
14+50	42' LT
14+61	30' RT
18+95	48' LT
19+21	47' LT
19+35	47' LT
19+35	14' RT
21+84	20' LT
21+84	14' RT
27+13	31 LT
27+13	14' RT
27+32	44' LT
27+45	33' RT
27+76	49' LT
27+81	31' RT
27+98	31' LT
27+98	14' RT
32+16	21' LT
32+16	14' RT
32+34	43' LT
32+74	42' LT
34+23	20' RT
34+27	20' LT
34+34	37' RT
34+62	45' LT
34+83	36' RT
35+14	14' RT
35+19	42' LT
35+25	25' LT

615.07 LOAM

STATION	TO	STATION
14+65 RT	TO	15+64 RT
16+81 LT	TO	18+13 LT
18+97 RT	TO	19+76 RT
19+38 LT	TO	19+87 LT
22+44 RT	TO	23+50 RT
22+55 LT	TO	22+78 LT
26+63 RT	TO	27+07 RT
28+07 LT	TO	28+47 LT
28+07 RT	TO	28+47 RT
31+70 RT	TO	32+50 RT
31+70 LT	TO	32+10 LT
32+73 LT	TO	34+19 LT
35+23 RT	TO	35+46 RT

618.13 SEEDING METHOD NUMBER 1

STATION	TO	STATION
14+65 RT	TO	15+64 RT
16+81 LT	TO	18+13 LT
18+97 RT	TO	19+76 RT
19+38 LT	TO	19+87 LT
22+44 RT	TO	23+50 RT
22+55 LT	TO	22+78 LT
26+63 RT	TO	27+07 RT
28+07 LT	TO	28+47 LT
28+07 RT	TO	28+47 RT
31+70 RT	TO	32+50 RT
31+70 LT	TO	32+10 LT
32+73 LT	TO	34+19 LT
35+23 RT	TO	35+46 RT

619.12 MULCH

STATION	TO	STATION
14+65 RT	TO	15+64 RT
16+81 LT	TO	18+13 LT
18+97 RT	TO	19+76 RT
19+38 LT	TO	19+87 LT
22+44 RT	TO	23+50 RT
22+55 LT	TO	22+78 LT
26+63 RT	TO	27+07 RT
28+07 LT	TO	28+47 LT
28+07 RT	TO	28+47 RT
31+70 RT	TO	32+50 RT
31+70 LT	TO	32+10 LT
32+73 LT	TO	34+19 LT
35+23 RT	TO	35+46 RT

626.11 PRECAST CONCRETE JUNCTION BOX

HIGH STREET AT SPRING STREET – 5 (EA)
CENTER STREET AT SPRING STREET – 5 (EA)
TEMPLE STREET AT SPRING STREET – 5 (EA)

626.21 METALLIC CONDUIT

HIGH STREET AT SPRING STREET – 90 (LF)

626.22 NON–METALLIC CONDUIT

HIGH STREET AT SPRING STREET – 300 (LF)
CENTER STREET AT SPRING STREET – 320 (LF)
TEMPLE STREET AT SPRING STREET – 325 (LF)

626.31 18” DIAMETER FOUNDATION

HIGH STREET AT SPRING STREET – 4 (EA) SEE SHEET 32 FOR LOCATIONS
CENTER STREET AT SPRING STREET – 2 (EA) SEE SHEET 33 FOR LOCATIONS
TEMPLE STREET AT SPRING STREET – 2 (EA) SEE SHEET 34 FOR LOCATIONS

626.32 24” DIAMETER FOUNDATION

HIGH STREET AT SPRING STREET – 1 (EA) SEE SHEET 32 FOR LOCATIONS
CENTER STREET AT SPRING STREET – 4 (EA) SEE SHEET 33 FOR LOCATIONS
TEMPLE STREET AT SPRING STREET – 2 (EA) SEE SHEET 34 FOR LOCATIONS

626.332 30” DIAMETER FOUNDATION DEPTH GREATER THAN 8 FT.

HIGH STREET AT SPRING STREET – 2 (EA) SEE SHEET 32 FOR LOCATIONS
CENTER STREET AT SPRING STREET – 2 (EA) SEE SHEET 33 FOR LOCATIONS
TEMPLE STREET AT SPRING STREET – 2 (EA) SEE SHEET 34 FOR LOCATIONS

626.35 CONTROLLER CABINET FOUNDATION

HIGH STREET AT SPRING STREET – 1 (EA) SEE SHEET 32 FOR LOCATIONS

643.71 TRAFFIC SIGNAL MODIFICATIONS

HIGH STREET AT SPRING STREET – SEE SHEETS 32 AND 35
CENTER STREET AT SPRING STREET – SEE SHEETS 33 AND 35
TEMPLE STREET AT SPRING STREET – SEE SHEETS 34 AND 35

643.83 VIDEO (THERMAL) DETECTION SYSTEM

HIGH STREET AT SPRING STREET – 1 (LS) 3–WAY SYSTEM. SEE SHEETS 32 AND 35
CENTER STREET AT SPRING STREET – 1 (LS) 4–WAY SYSTEM. SEE SHEETS 33 AND 35

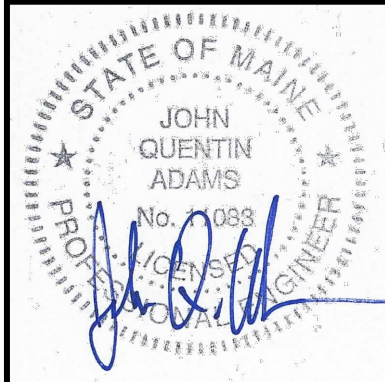
645.106 DEMOUNT REGULATORY, WARNING SIGN

HIGH STREET AT SPRING STREET – 12 (EA)
CENTER STREET AT SPRING STREET – 3 (EA)
TEMPLE STREET AT SPRING STREET – 3 (EA)

645.271 REG, WARNING, CONFIRMATION, RTE SIGNS TYPE 1

HIGH STREET AT SPRING STREET – 28 (SF)
CENTER STREET AT SPRING STREET – 20 (SF)
TEMPLE STREET AT SPRING STREET – 10 (SF)

NOTE: REFER TO CURB LAYOUT PLANS FOR 609 ITEMS
REFER TO PAVEMENT MARKING PLANS FOR 626 ITEMS



MINIMUM ULTIMATE
4000 lbs. PER SQ. INCH
UNLESS OTHERWISE NOTED.

CAST OF PRECAST

BARREL MANUFACTURED PER

HOLE COVERS SHALL BE SOLID
DIAMETER DRILLED PICK HOLE
CENTER OF THE COVER.

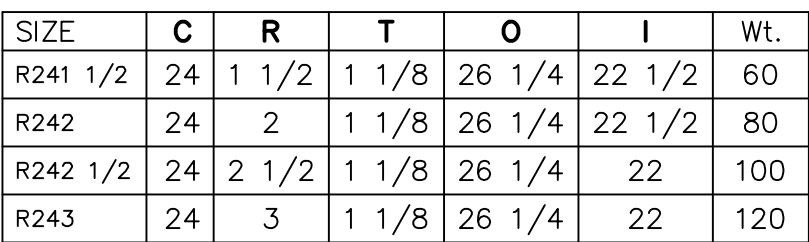
ERS SHALL HAVE "SEWER"
STORMWATER/DRAIN
VE "DRAIN" CAST INTO THE

6. ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING
COATING APPLIED TO THE EXTERIOR SURFACE.

7. CASTINGS SHALL CONFORM TO ASTM DESIGNATION
A48—CLASS 35.

8. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS
SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL
REMAIN THE PROPERTY OF THE CITY OF PORTLAND.

9. ALL CATCH BASIN OUTLETS SHALL BE INSTALLED WITH A
"SNOOT" TRAP, OR APPROVED EQUAL. FURNISHING AND
INSTALLING THE TRAP INSIDE THE NEW CATCH BASINS
SHALL BE CONSIDERED INCIDENTAL TO TYPE B-1C
STRUCTURES AND NO EXTRA PAYMENT WILL BE MADE.



NOT TO SCALE



1. LARGER DIAMETER STRUCTURES MAY BE REQUIRED DUE TO SIZE OR GEOMETRY OF PIPE CONNECTIONS AT MANHOLE. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1"-0" DIA. INCREASE. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. CAST IRON GRATES SHALL BE EQUAL TO EAST JORDAN IRON WORKS, PRODUCT NO. 00552052B07, HEAVY DUTY CASCADE GRATE. SUBMIT CATALOG SHEETS TO ENGINEER FOR APPROVAL.
4. A FLAT TOP CONCRETE SLAB MEASURING 12" THICK MAY BE SUBSTITUTED FOR CONE SECTION IF DISTANCE BETWEEN TOP OF GRATE AND CORE HOLE DOES NOT ACCOMMODATE FULL CONE HEIGHT. SUBMIT SHOP DRAWINGS TO ENGINEER PRIOR TO LOADING.

NOT TO SCALE



BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860) 434-3195

DESCRIPTION	DATE	SCALE
18R10 SNOUT OIL & DEBRIS STOP	03/15/02	NONE
DRAWING NUMBER		
18R10		

NOTE:

ALL MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE, LOCATED 8" FROM THE CENTER OF THE COVER.

ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL
STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.



SECTION B - B
FRAME

NOT TO SCALE



NOT TO SCALE



GRANITE EDGING SHALL BE "HEAVY EDGING" BY SWENSON GRANITE, OR EQUAL, GRAY, 4"x12" W/THERMAL TOP, SPLIT FACE 4-EDGES.REVEAL AT SIDEWALK SHALL BE 4" UNLESS OTHERWISE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE CITY ARBORIST. GRANITE CORNERS SHALL BE PINNED AS REQUIRED TO PREVENT SETTLING & GAPS.

METHOD OF MEASUREMENT FOR TREE WELLS SHALL BE PER EACH.

BASIS OF PAYMENT WILL BE AT THE CONTRACT UNIT PRICE FOR EACH ACCEPTED TREE WELL FURNISHED AND INSTALLED. PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, DELIVERING, INSTALLING, BACKFILLING, COMPACTING, PINNING, ALL LABOR AND EQUIPMENT, CLEAN-UP, AND ASSOCIATED WORK.

TREE WELL DETAIL

REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_Details_2014.dwg

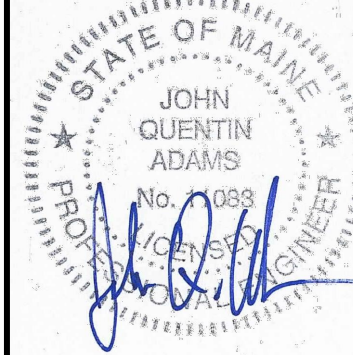
DESIGNED BY:

DRAWN BY:

CHECKED BY:

SCALE:

DATE:



SPRING STREET
RECONSTRUCTION PROJECT
DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

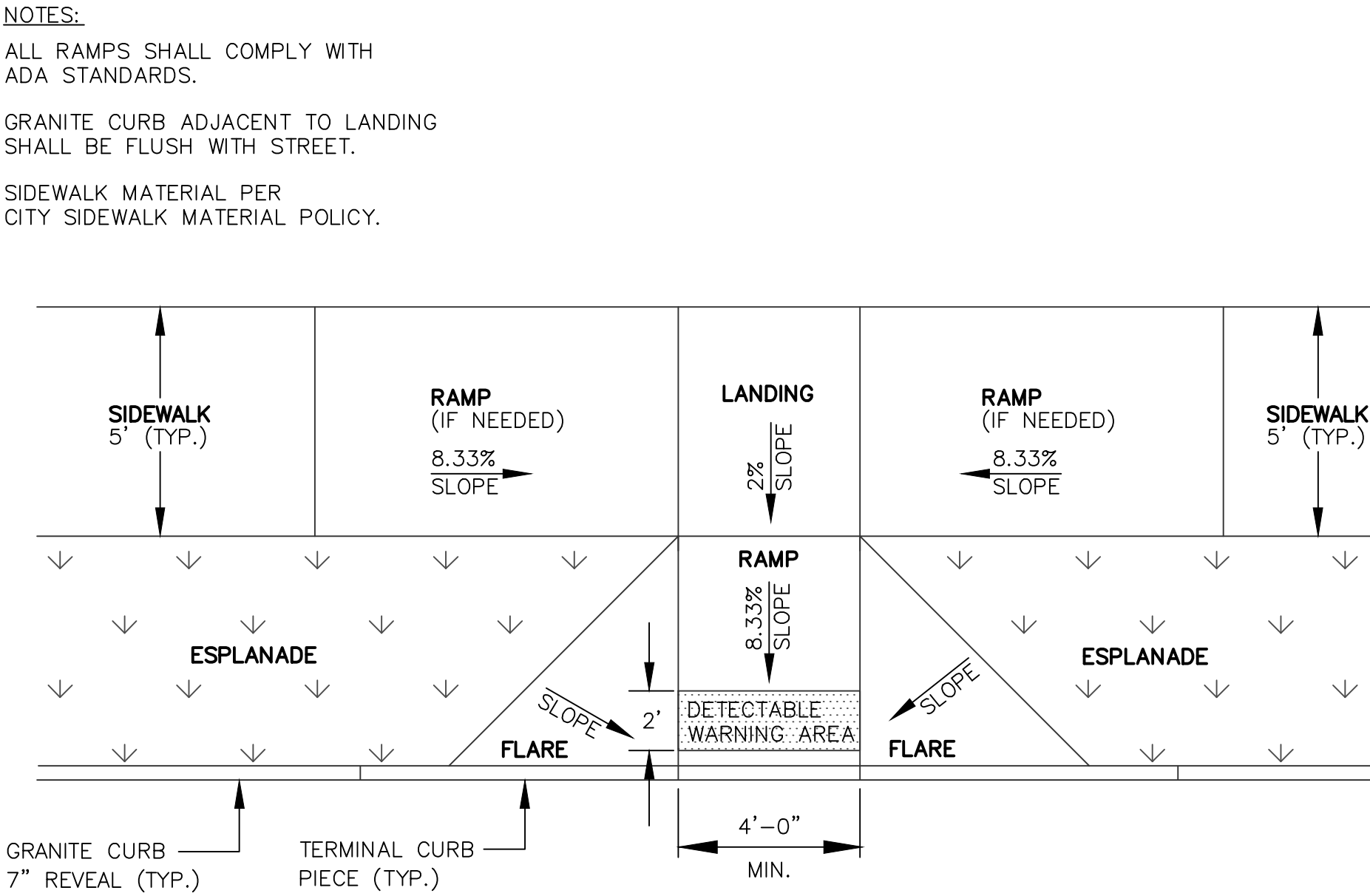


SHEET #

7 OF 35

PLAN NUMBER

D-1



PLAN VIEW

PERPENDICULAR ADA RAMP LAYOUT FOR
NARROW SIDEWALK WITH ESPLANADE

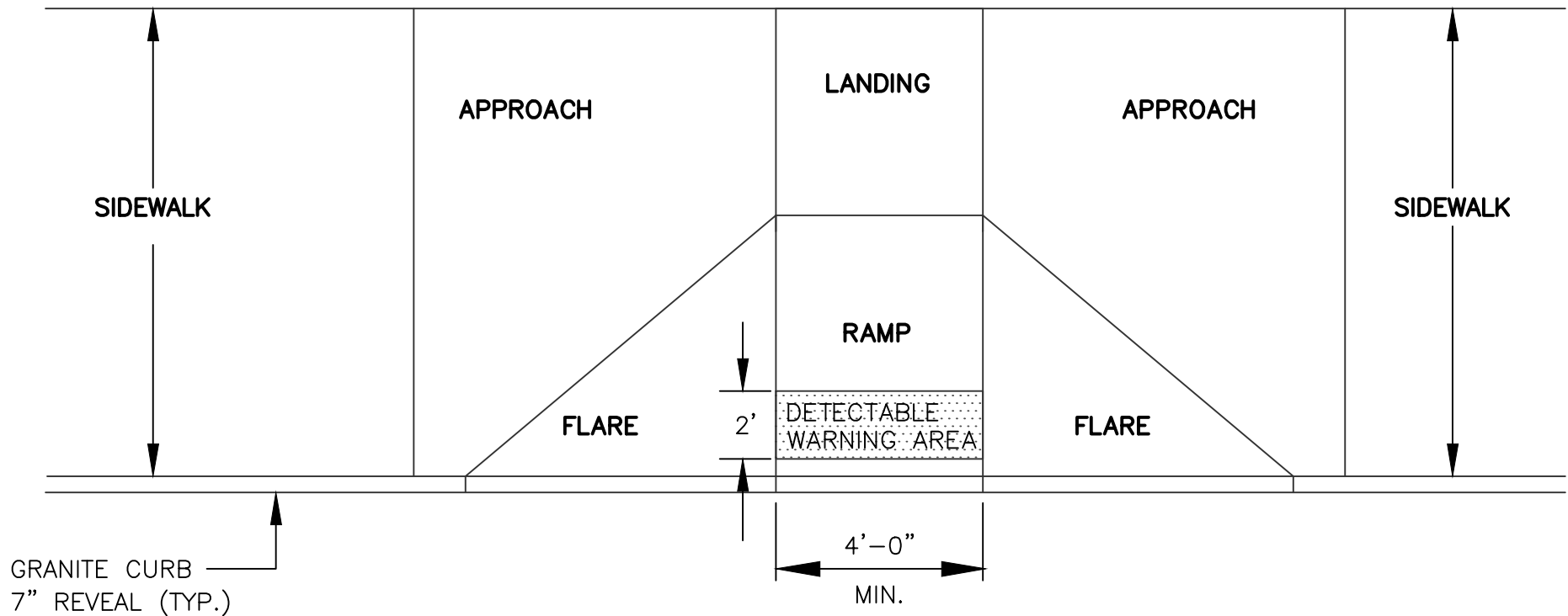
NOT TO SCALE

NOTES:

ALL RAMPS SHALL COMPLY WITH ADA STANDARDS.

GRANITE CURB ADJACENT TO RAMP SHALL BE FLUSH WITH STREET.

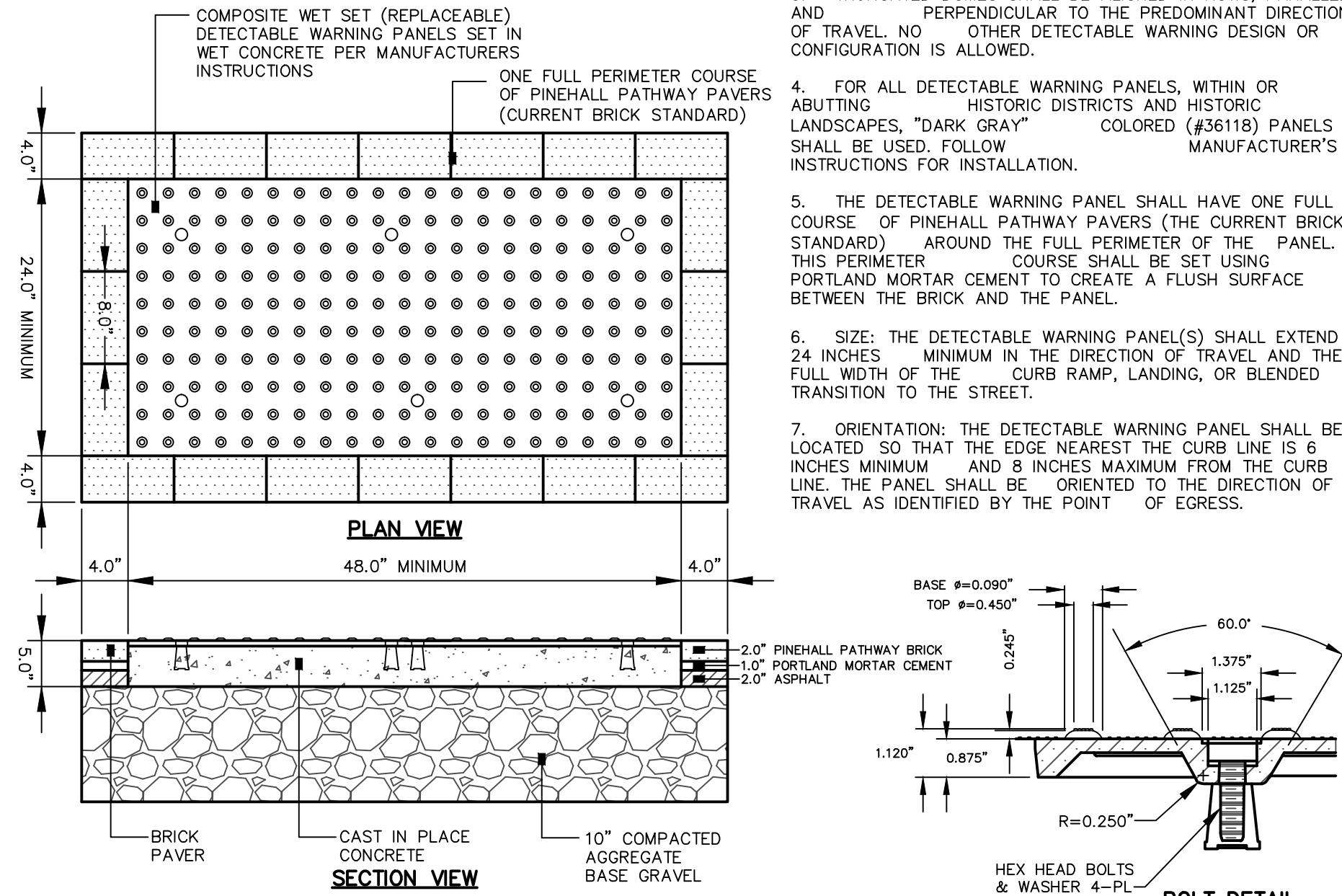
DESIGN ELEMENT	SLOPE IN DIRECTION OF TRAVEL	CROSS SLOPE
APPROACH	8.33% MAXIMUM	2%
LANDING	2%	2%
RAMP	8.33% MAXIMUM	MATCH STREET GRADE
FLARE	10% MAX. AT CURB FACE	-
SIDEWALK	MATCH STREET GRADE	2%



PLAN VIEW

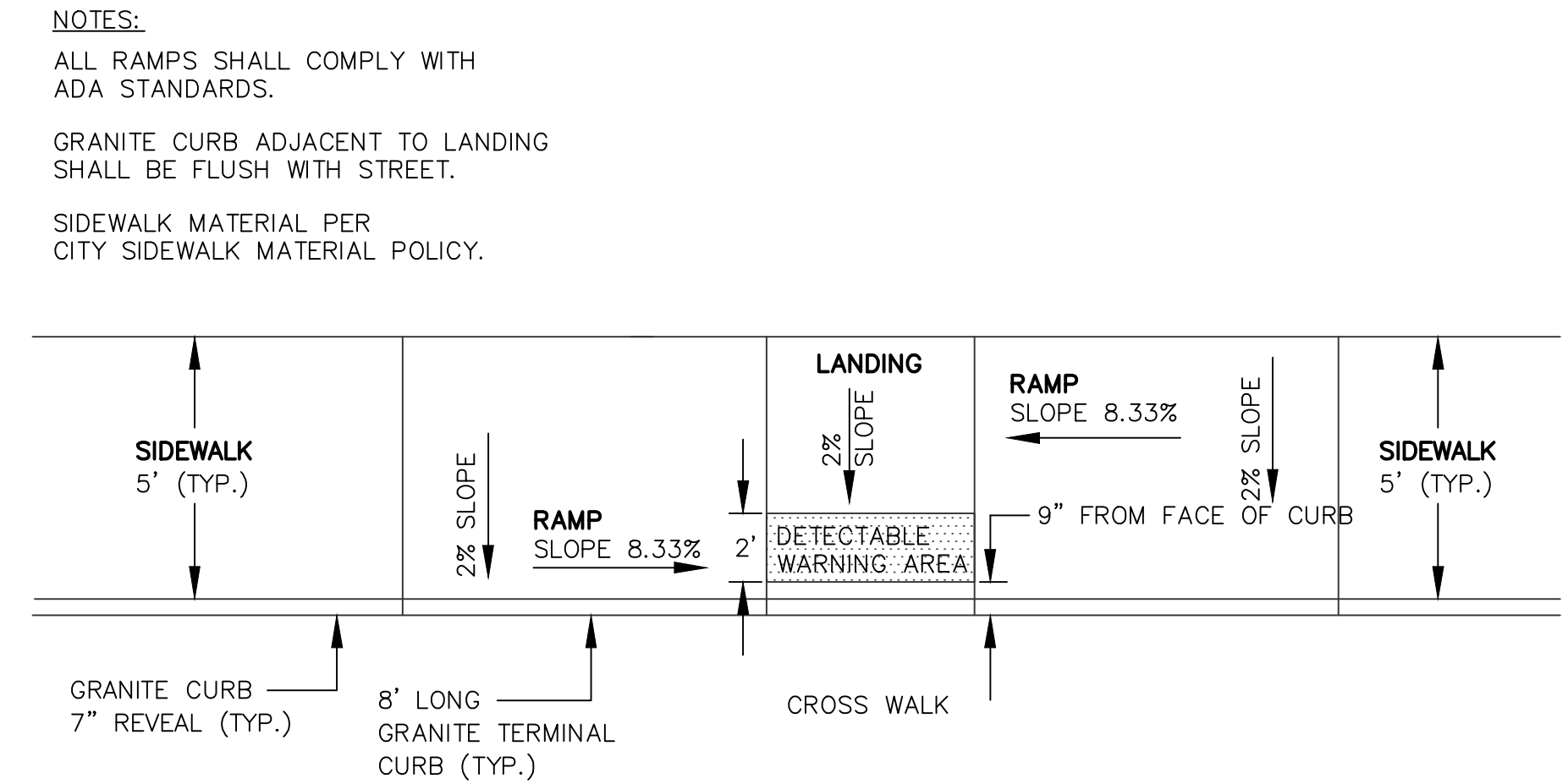
PERPENDICULAR ADA RAMP LAYOUT FOR
WIDE SIDEWALK WITH NO ESPLANADE

NOT TO SCALE



SIDEWALK RAMP DETECTABLE WARNING PANEL (HISTORIC DISTRICTS AND LANDSCAPES)

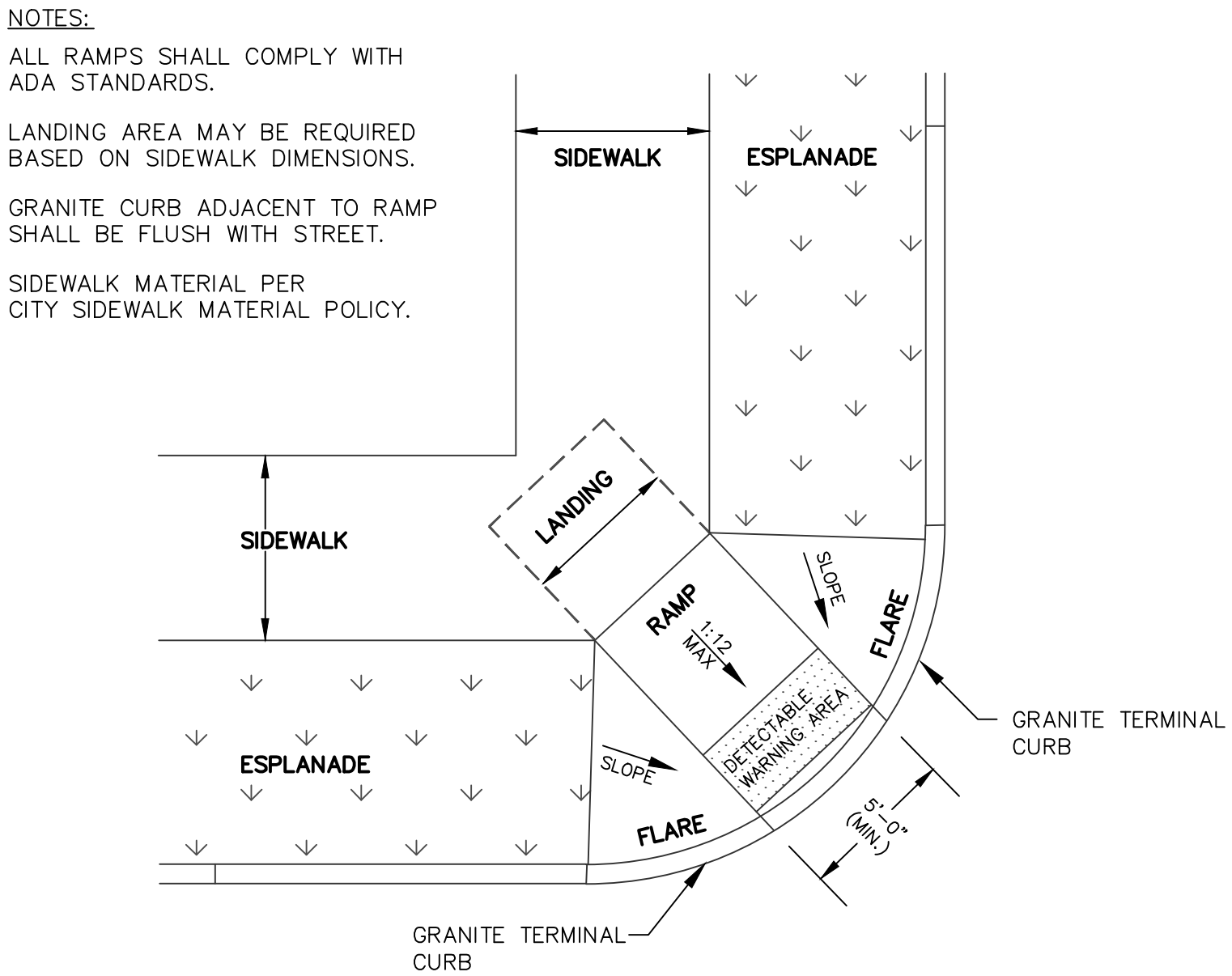
NOT TO SCALE



PLAN VIEW

PARALLEL SIDEWALK RAMP LAYOUT FOR
NARROW SIDEWALK WITH NO ESPLANADE

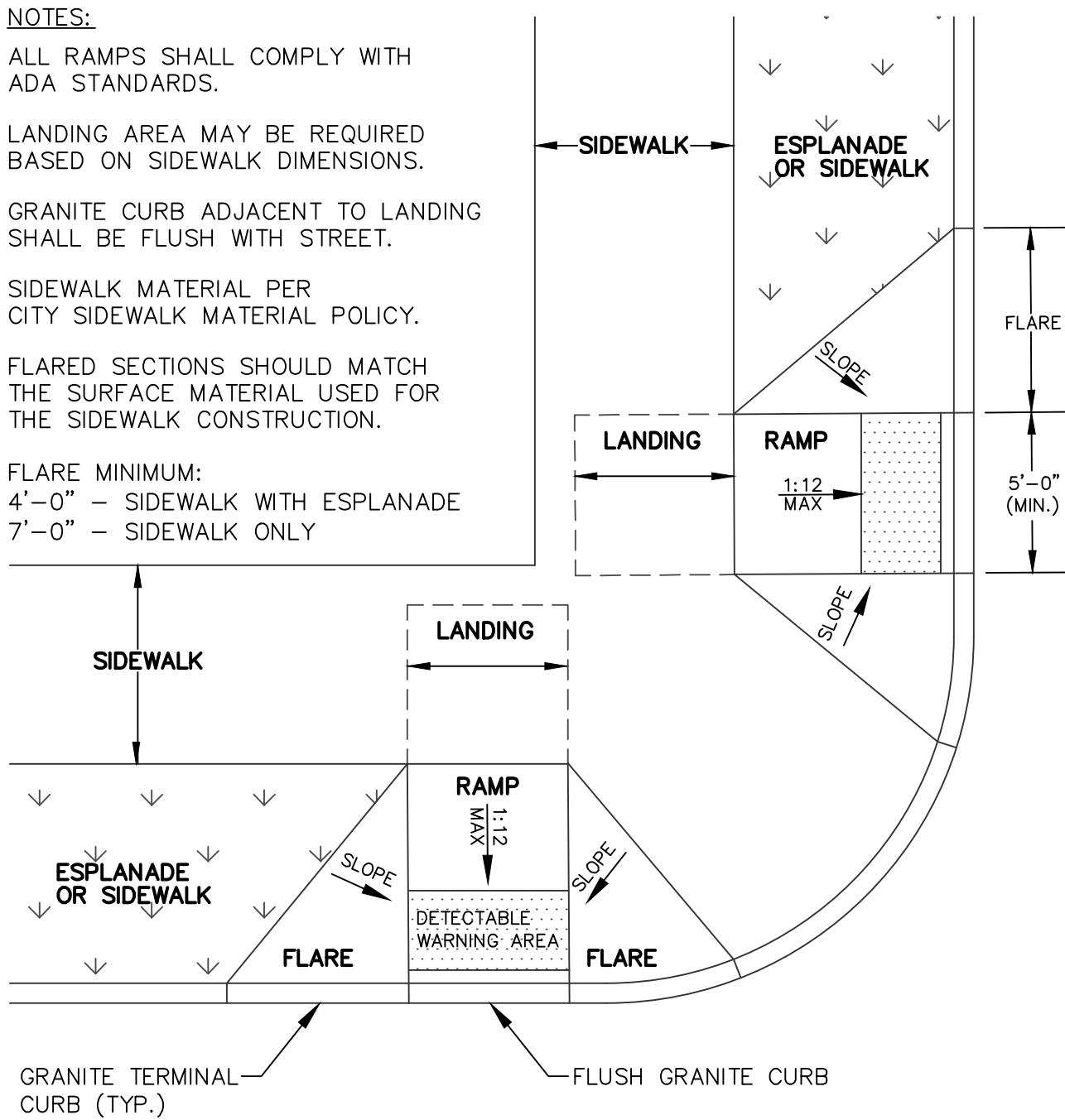
NOT TO SCALE



DIAGONAL SIDEWALK RAMP LAYOUT AT INTERSECTION
FOR SIDEWALK WITH ESPLANADE

NOT TO SCALE

(REQUIRES WAIVER)



PREFERRED SIDEWALK RAMP AT INTERSECTION

NOT TO SCALE

NOTES:

- COMPOSITE WET SET (REPLACEABLE) DETECTABLE WARNING PANELS SHALL BE AS MANUFACTURED BY ADA SOLUTIONS, INC. (WWW.ADATILE.COM), OR APPROVED EQUAL.
- CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MAINE D.O.T. CLASS A STRUCTURAL CONCRETE. MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE CONCRETE SHALL BE SEALED PRIOR TO SETTING PANELS.
- TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. NO OTHER DETECTABLE WARNING DESIGN OR CONFIGURATION IS ALLOWED.
- FOR ALL DETECTABLE WARNING PANELS, WITHIN OR ABUTTING HISTORIC DISTRICTS AND HISTORIC LANDSCAPES, "DARK GRAY" COLORED (#36118) PANELS SHALL BE USED. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
- THE DETECTABLE WARNING PANEL SHALL HAVE ONE FULL COURSE OF PINEHALL PATHWAY PAVERS (THE CURRENT BRICK STANDARD) AROUND THE FULL PERIMETER OF THE PANEL. THIS PERIMETER COURSE SHALL BE SET USING PORTLAND MORTAR CEMENT TO CREATE A FLUSH SURFACE BETWEEN THE BRICK AND THE PANEL.
- SIZE: THE DETECTABLE WARNING PANEL(S) SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
- ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.

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REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_Details_2014.dwg

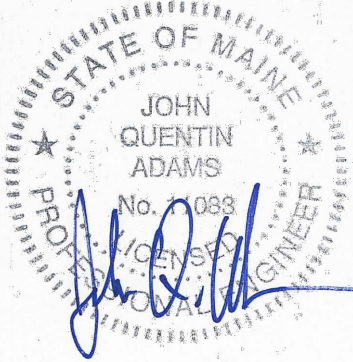
DESIGNED BY:

DRAWN BY:

CHECKED BY:

SCALE:

DATE:



SPRING STREET
RECONSTRUCTION PROJECT
DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #

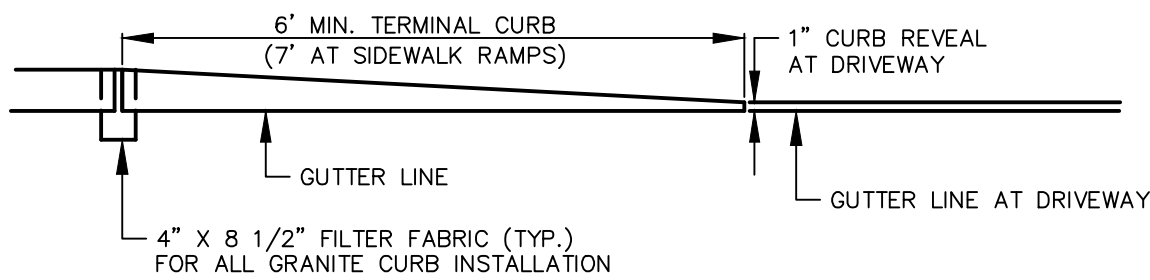
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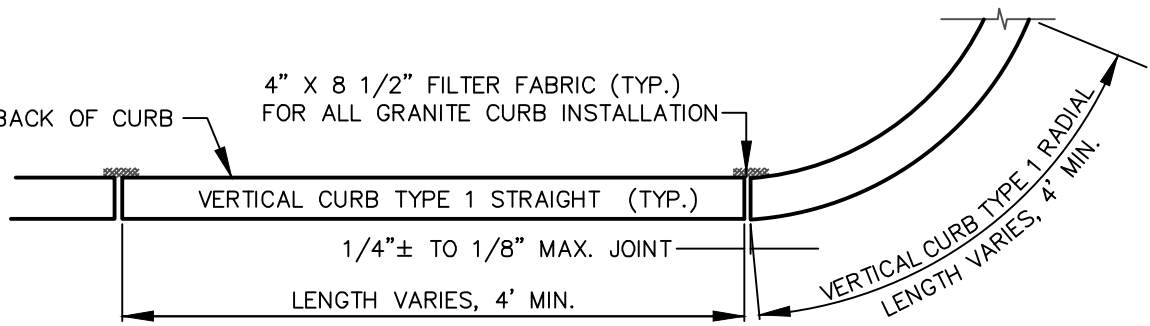
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PLAN NUMBER

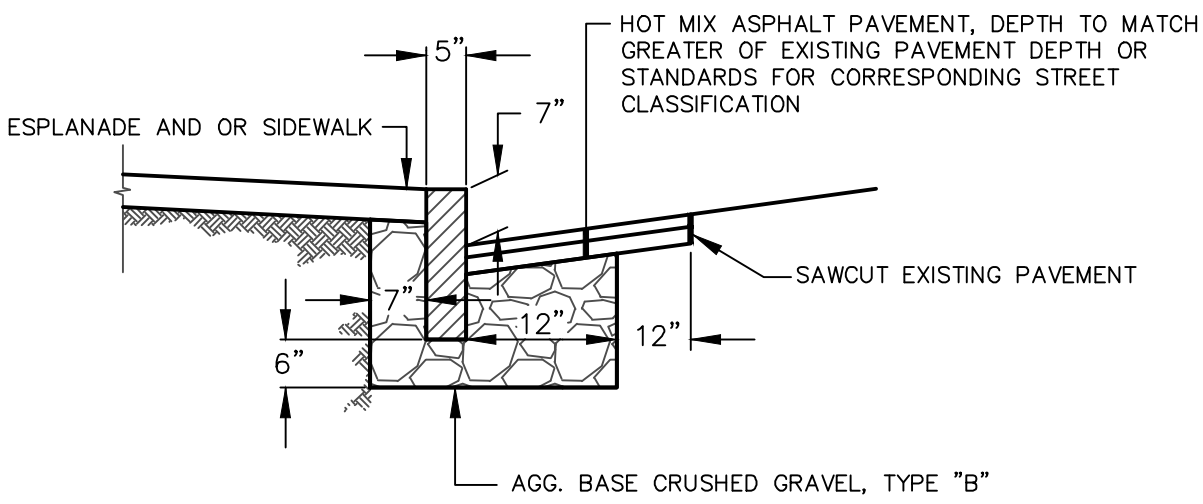
D-3



TERMINAL CURB PROFILE



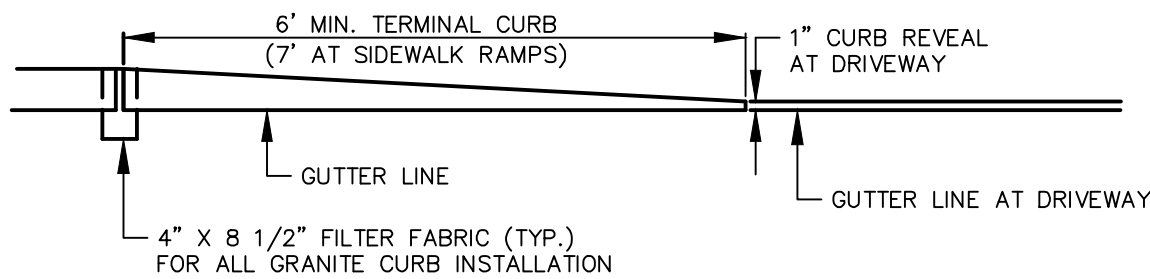
VERTICAL GRANITE CURB PLAN VIEW



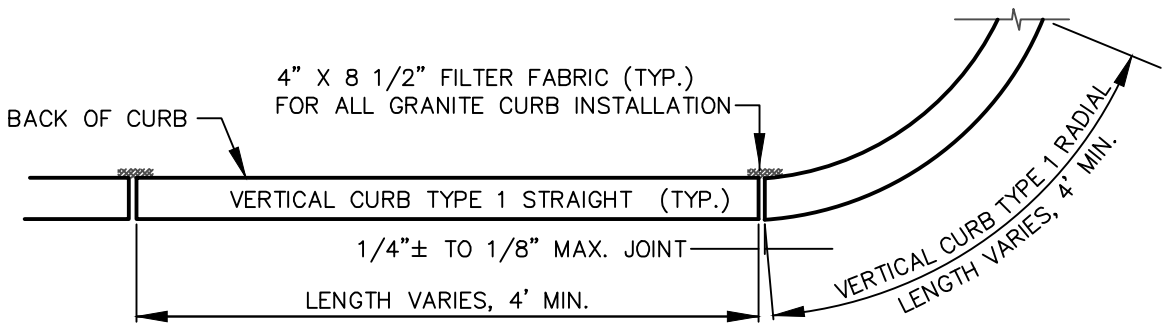
VERTICAL GRANITE CURB CROSS SECTION

MAINE DOT TYPE-1 VERTICAL GRANITE CURB
INSTALLATION IN EXISTING STREETS

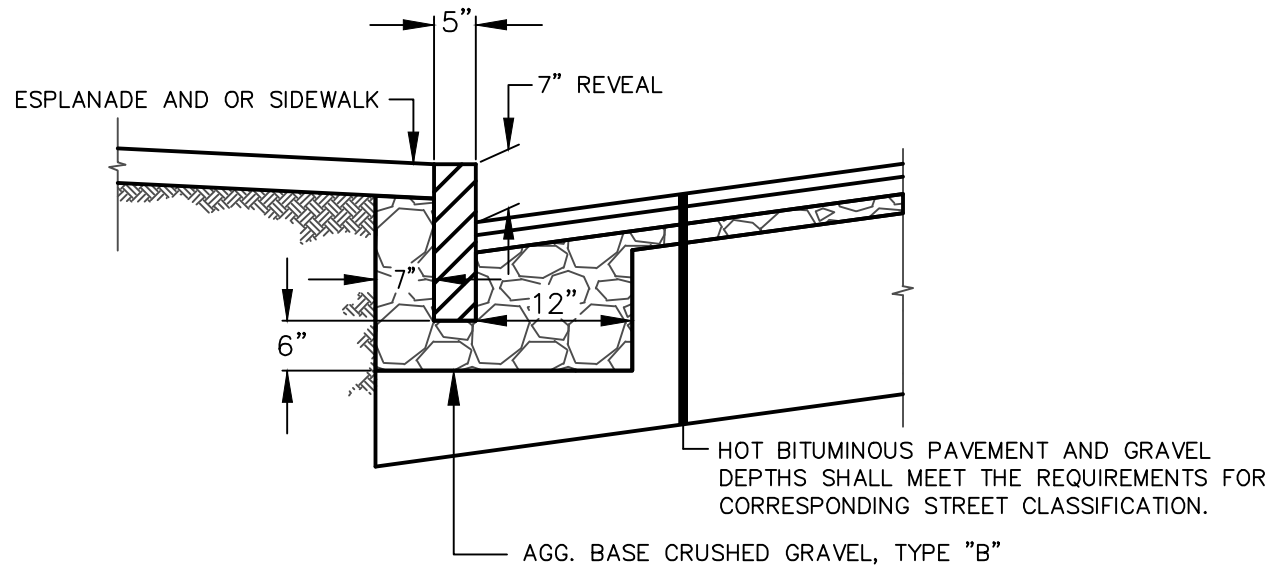
NOT TO SCALE



TERMINAL CURB PROFILE



VERTICAL GRANITE CURB PLAN VIEW

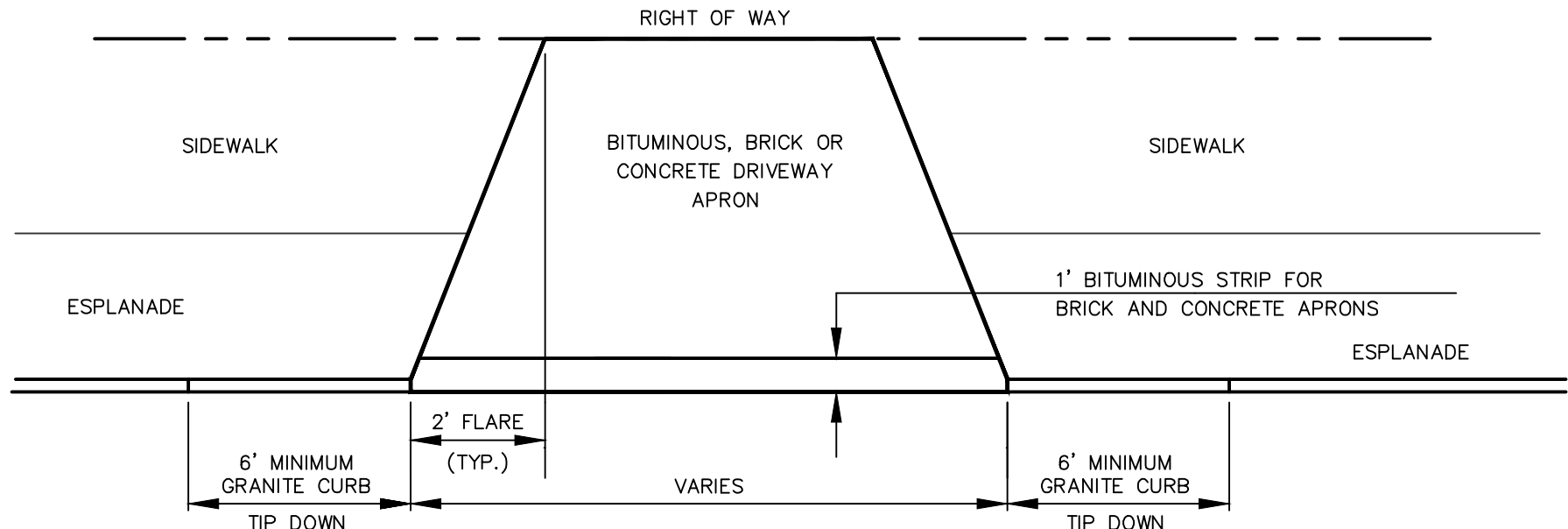


VERTICAL GRANITE CURB CROSS SECTION

MAINE DOT TYPE-1 VERTICAL GRANITE CURB
FULL DEPTH STREET CONSTRUCTION

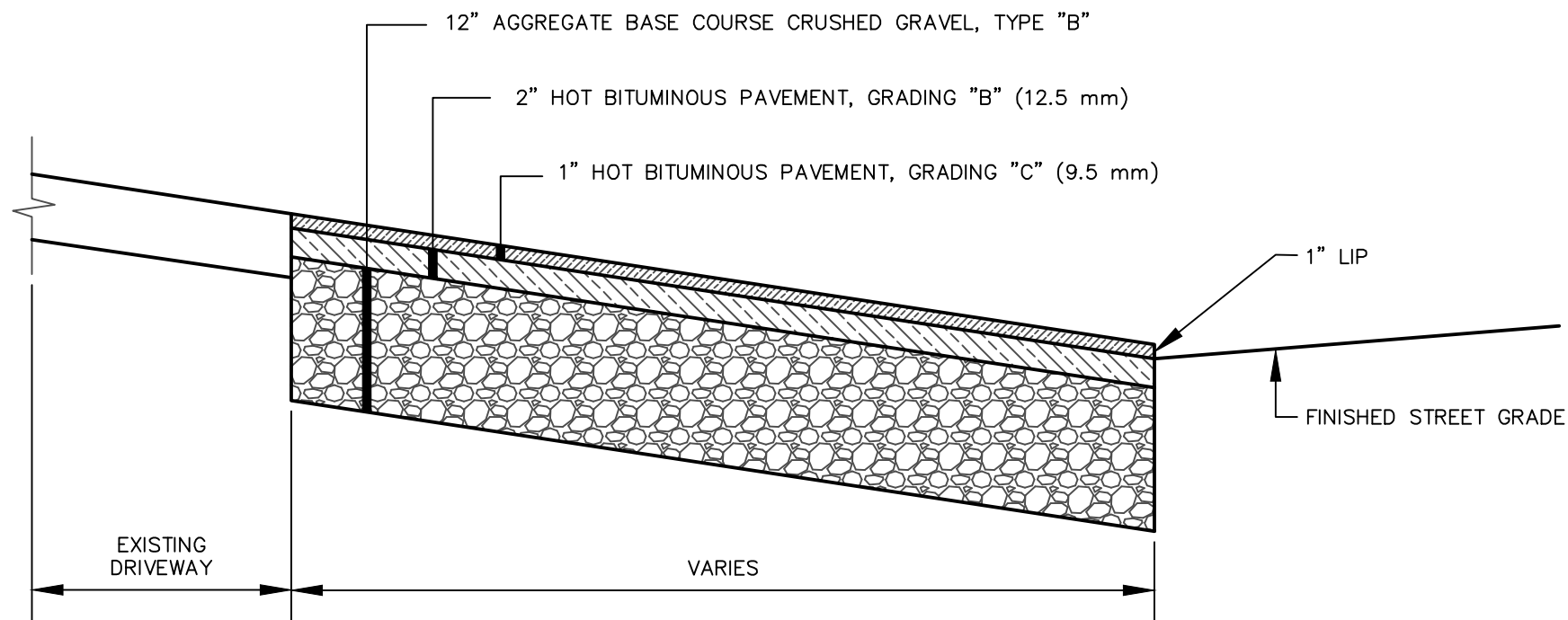
NOT TO SCALE

NOTE:
MATCH GRADE OF EXISTING DRIVEWAY
AT R. O. W. LINE, EXCEPT WHEN
DIRECTED OTHERWISE BY CITY ENGINEER.



DRIVEWAY APRON LAYOUT

NOT TO SCALE



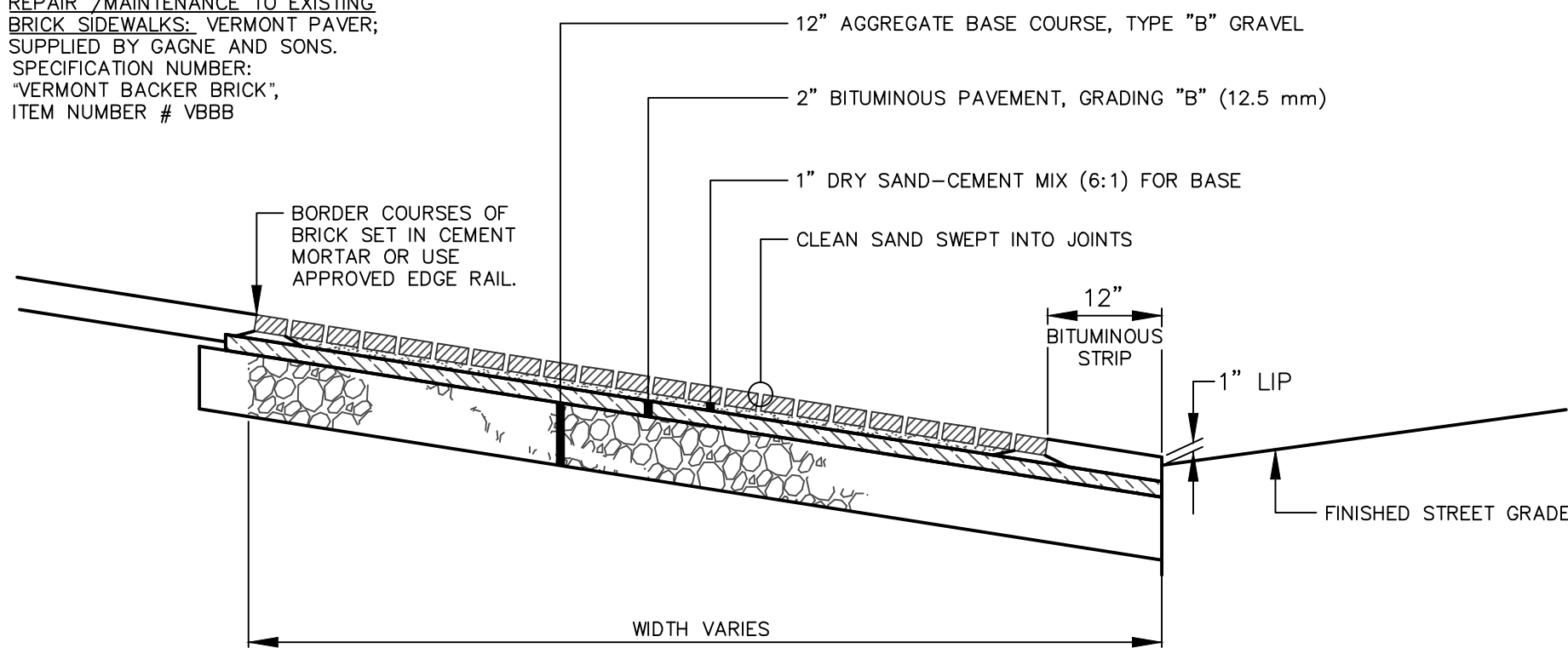
BITUMINOUS DRIVEWAY APRON

NOT TO SCALE

BRICKS TO BE USED:

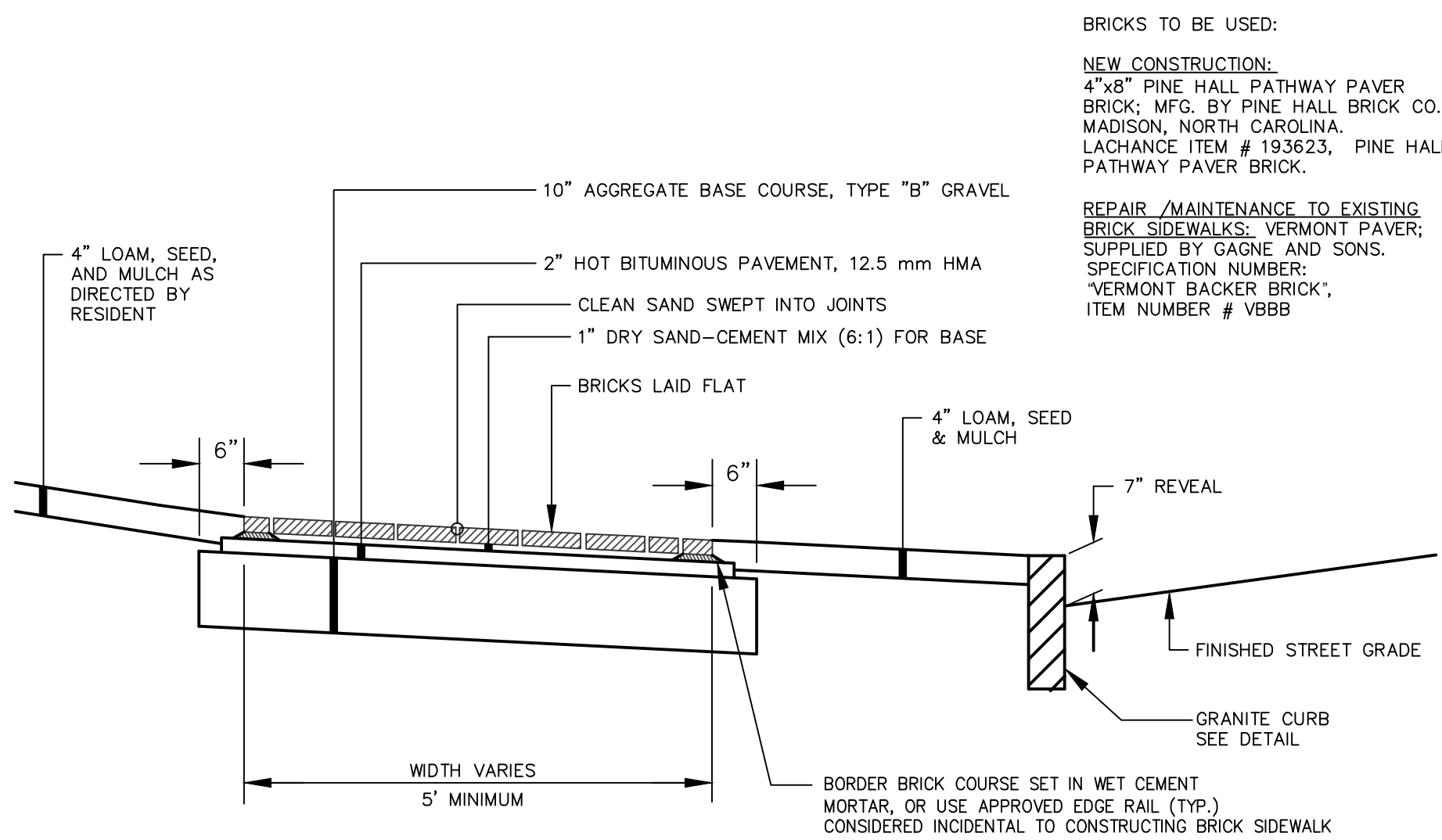
NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER
BRICK; MFG. BY PINE HALL BRICK CO.,
MADISON, NORTH CAROLINA.
LACHANCE ITEM # 193623, PINE HALL
PATHWAY PAVER BRICK.

REPAIR /MAINTENANCE TO EXISTING
BRICK SIDEWALKS: VERMONT PAVER;
SUPPLIED BY GAGNE AND SONS.
SPECIFICATION NUMBER:
"VERMONT BACKER BRICK",
ITEM NUMBER # VB88



BRICK DRIVEWAY APRON WITH BITUMINOUS BASE

NOT TO SCALE



BRICK SIDEWALK WITH BITUMINOUS BASE

NOT TO SCALE

BRICKS TO BE USED:

NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER
BRICK; MFG. BY PINE HALL BRICK CO.,
MADISON, NORTH CAROLINA.
LACHANCE ITEM # 193623, PINE HALL
PATHWAY PAVER BRICK.

REPAIR /MAINTENANCE TO EXISTING
BRICK SIDEWALKS: VERMONT PAVER;
SUPPLIED BY GAGNE AND SONS.
SPECIFICATION NUMBER:
"VERMONT BACKER BRICK",
ITEM NUMBER # VB88

DESIGNED BY:

DRAWN BY:

CHECKED BY:

SCALE:

DATE:

REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_Details_2014.dwg

DESIGNED BY:

DRAWN BY:

CHECKED BY:

SCALE:

DATE:

REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_Details_2014.dwg

SPRING STREET
RECONSTRUCTION PROJECT
DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



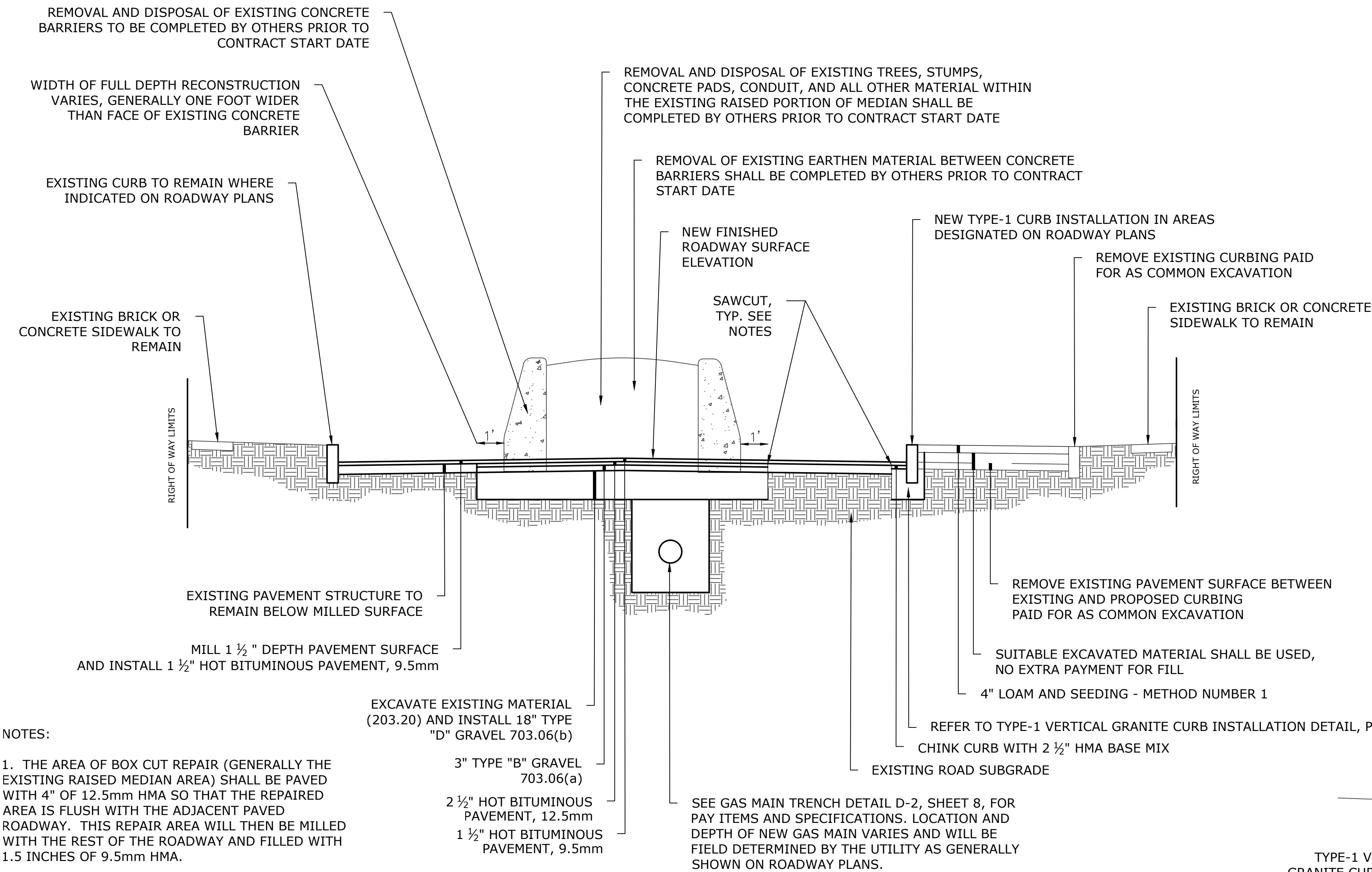
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10 OF 35

PLAN NUMBER

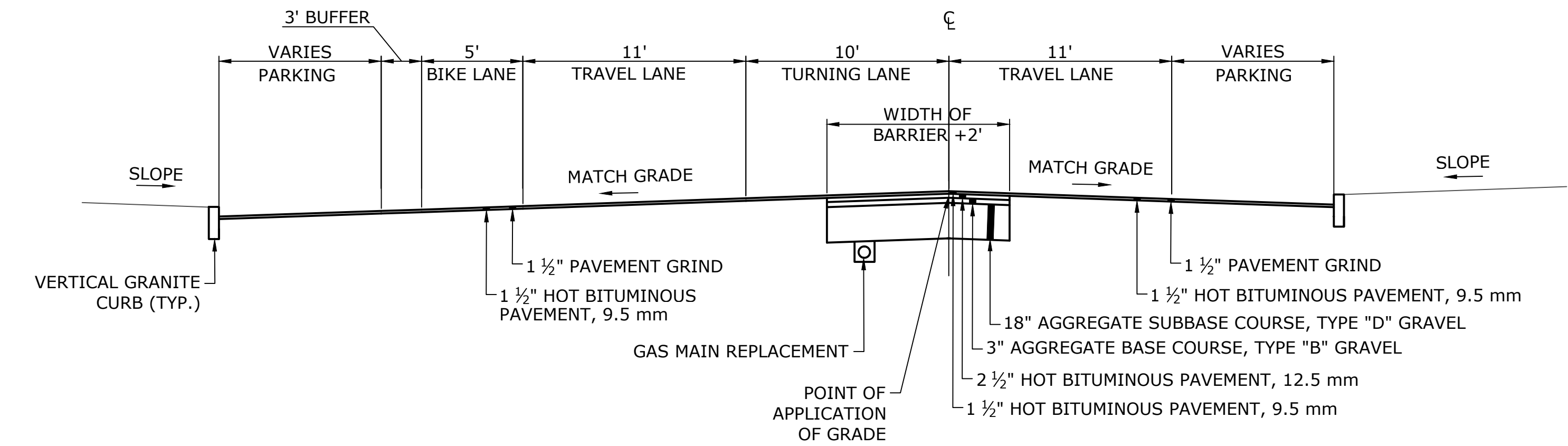
D-4

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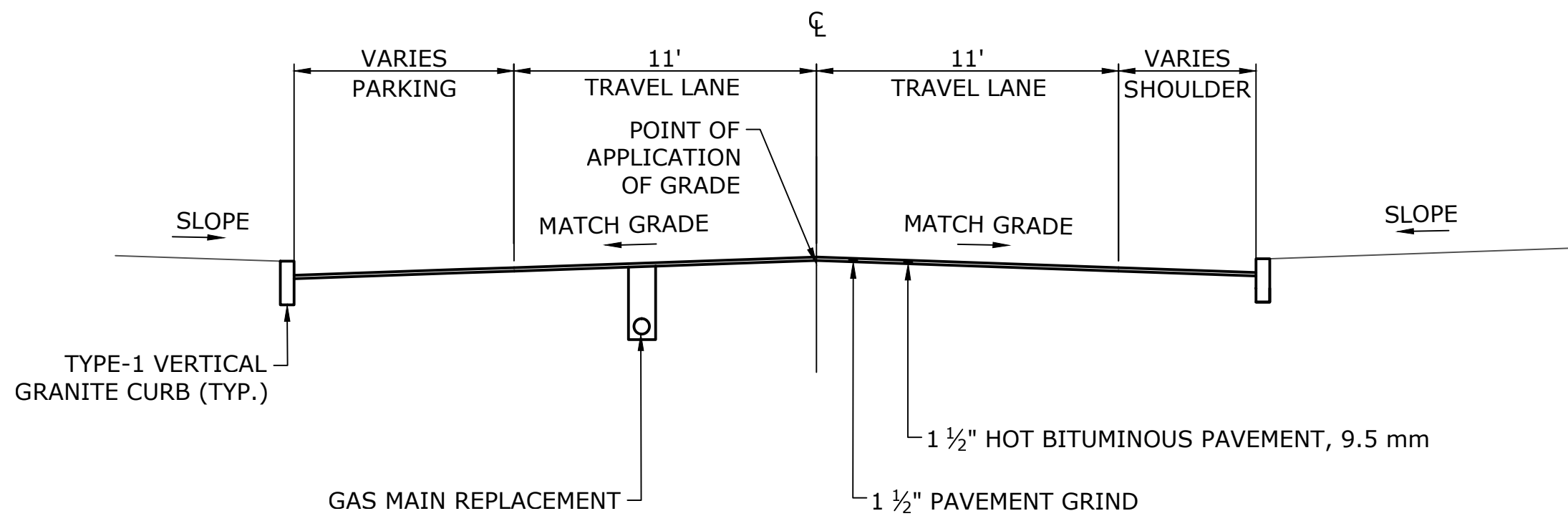
100 Commercial Street
Suite 417
Portland, Maine 04101
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www.miloneandmacbroom.com



TYPICAL ROADWAY SECTION - SPRING STREET
MEDIAN REMOVAL AREAS
NOT TO SCALE

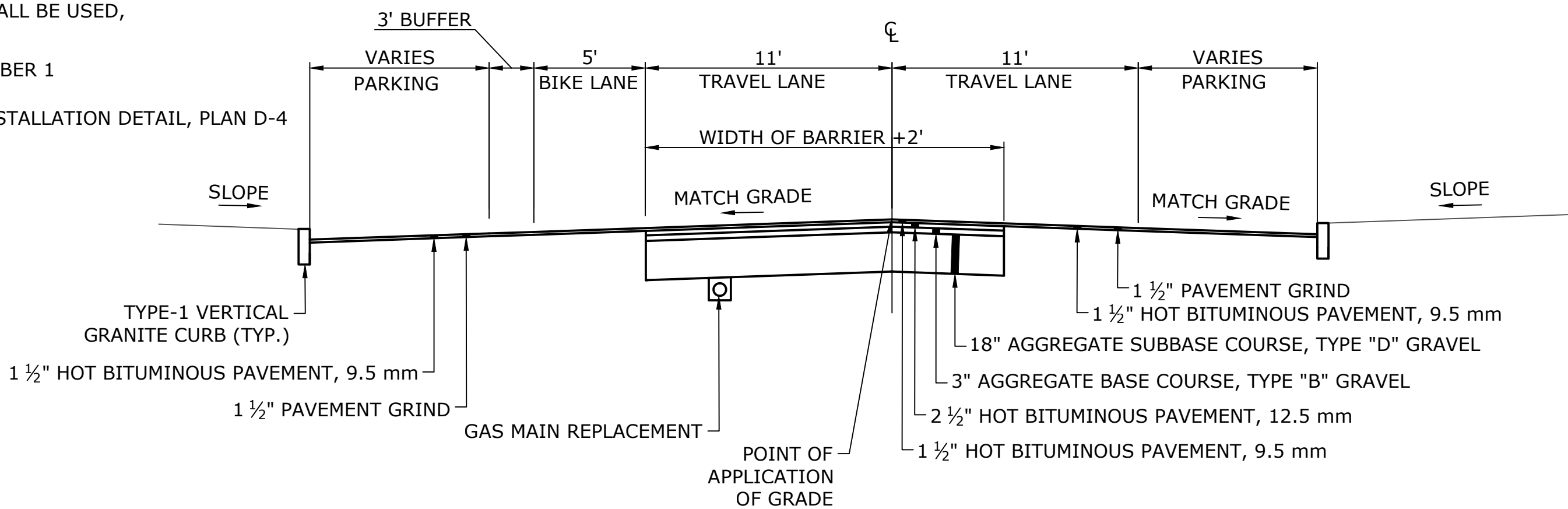


TYPICAL ROADWAY SECTION - SPRING STREET
INTERSECTION APPROACHES WITH TURN LANES AND BIKE LANE
NOT TO SCALE

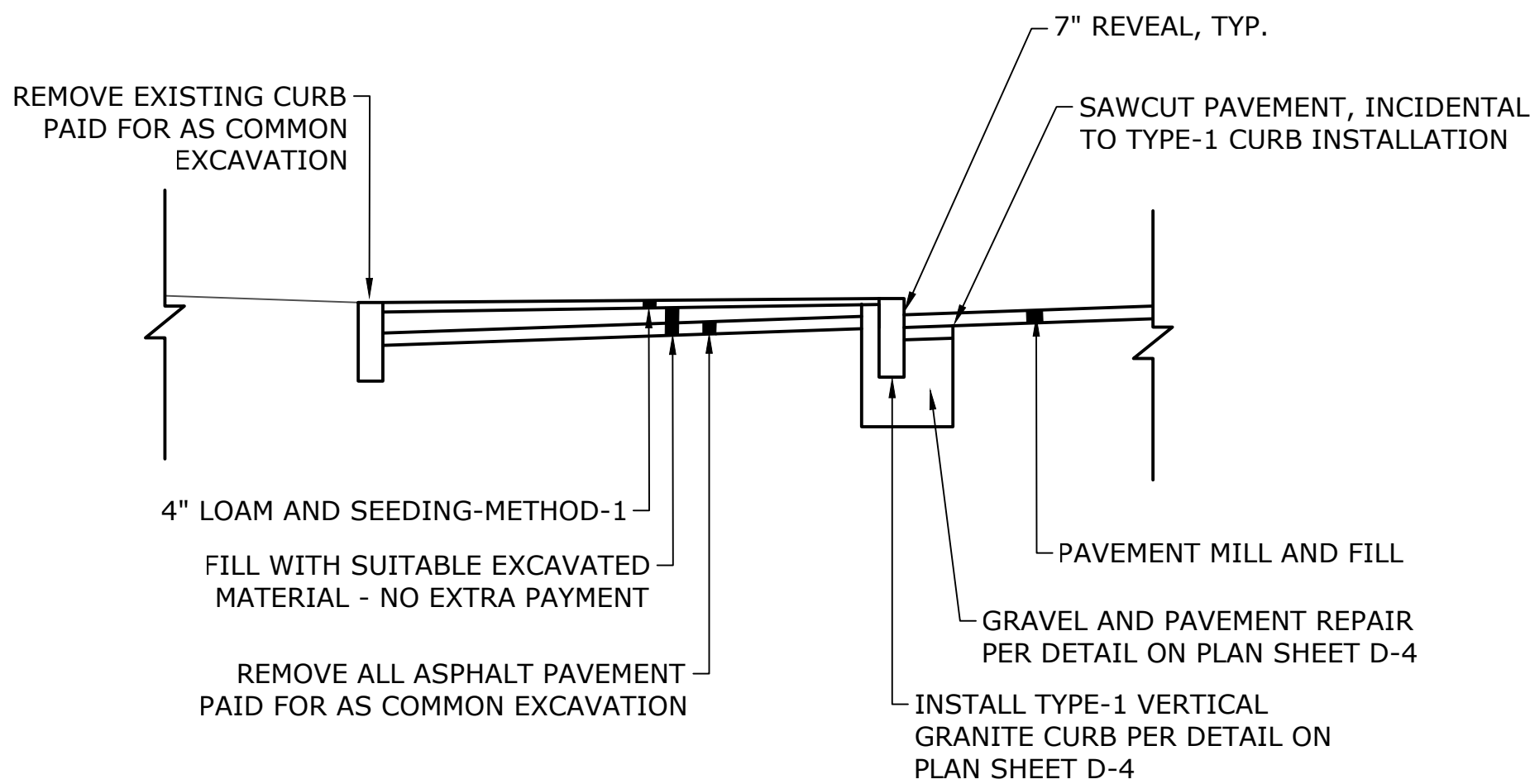


TYPICAL ROADWAY SECTION - SPRING STREET
NO EXISTING MEDIAN
NOT TO SCALE

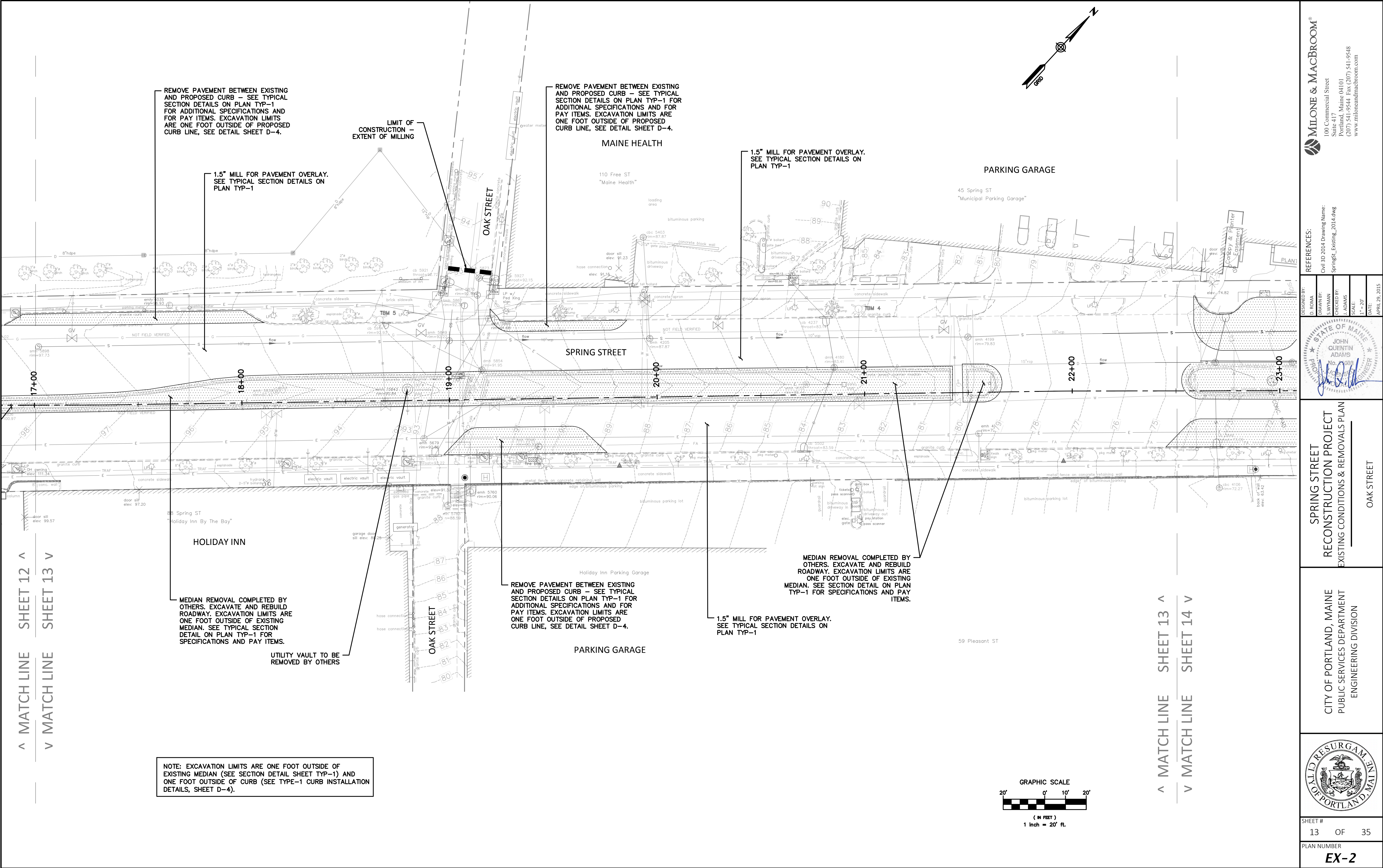
NOTE: SOME AREAS THROUGH INTERSECTIONS ARE SUPERELEVATED AND DO NOT HAVE A ROAD SURFACE CROWN



TYPICAL ROADWAY SECTION - SPRING STREET
TWO-LANE ROAD WITH PARKING AND BIKE LANE
NOT TO SCALE



TYPICAL REMOVE PAVEMENT AND ESTABLISH AS LAWN DETAIL
NOT TO SCALE



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DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
1" = 20'

DATE:
APRIL 29, 2015

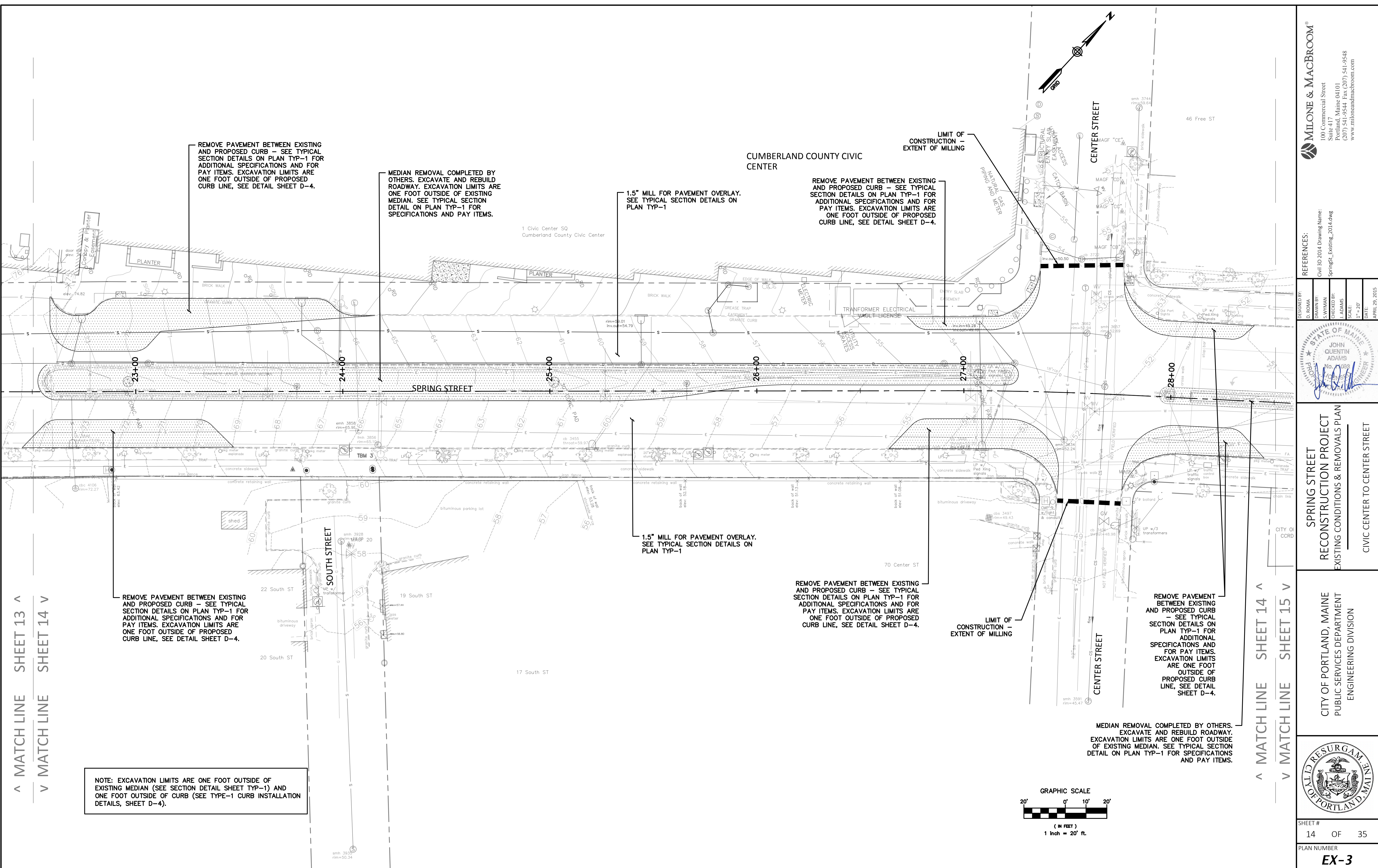
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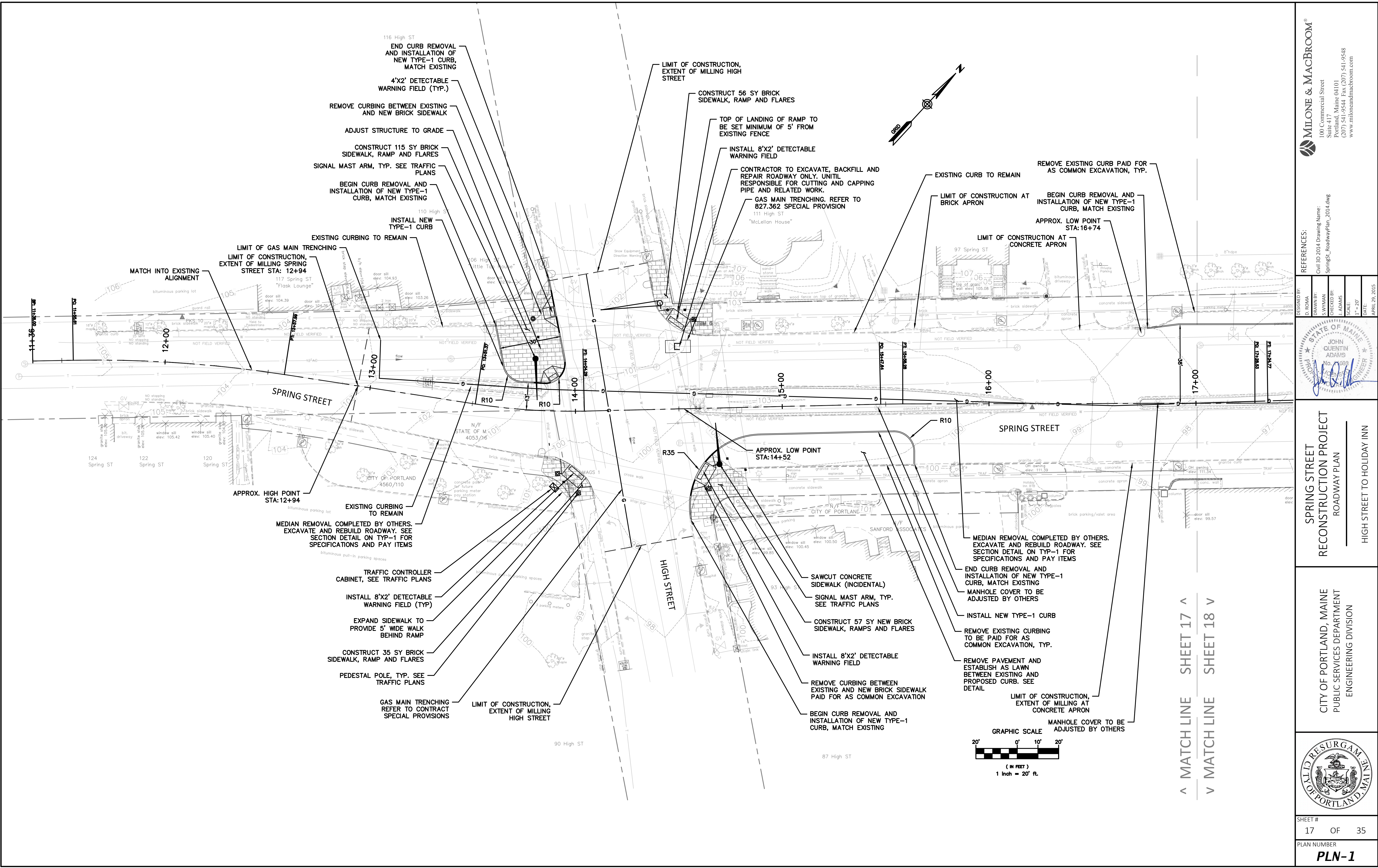
STATE OF MAINE
JOHN QUENTIN ADAMS
No. 0088
J. Adams

SPRING STREET
RECONSTRUCTION PROJECT
EXISTING CONDITIONS & REMOVALS PLAN
OAK STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

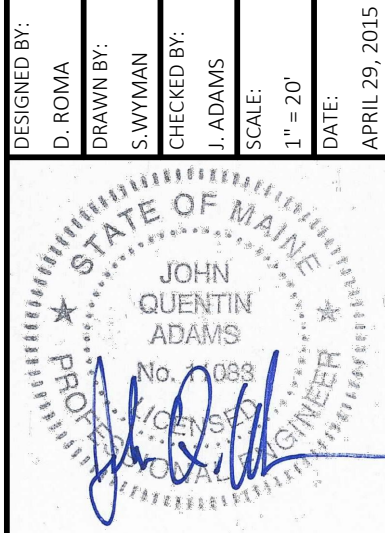
SHEET #
13 OF 35
PLAN NUMBER
EX-2





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DESIGNED BY: D. ROMA
DRAWN BY: S. WYMAN
CHECKED BY: J. ADAMS
SCALE: 1" = 20'
DATE: APRIL 29, 2015



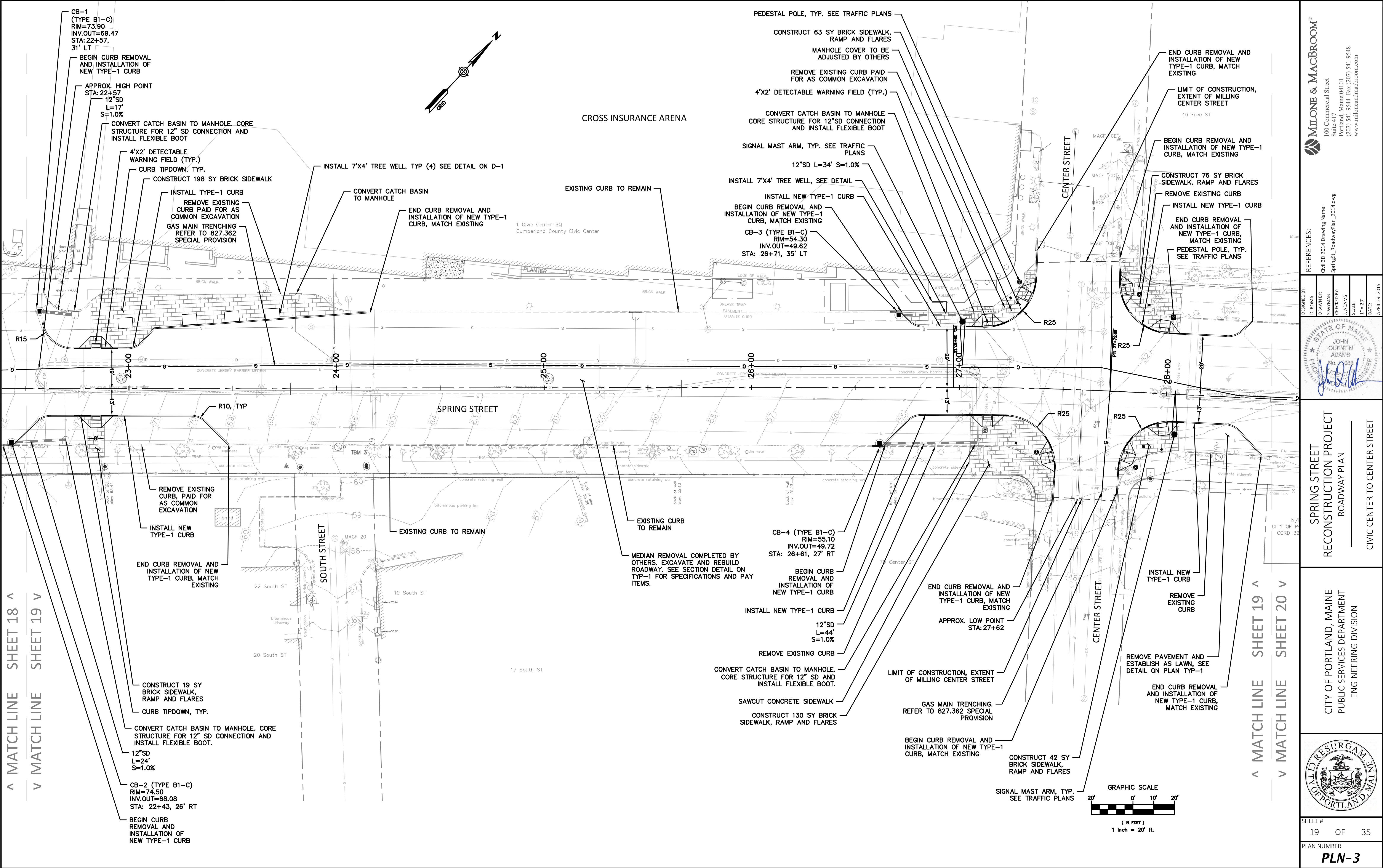
**SPRING STREET
RECONSTRUCTION PROJECT
ROADWAY PLAN**

HIGH STREET TO HOLIDAY INN

**CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION**

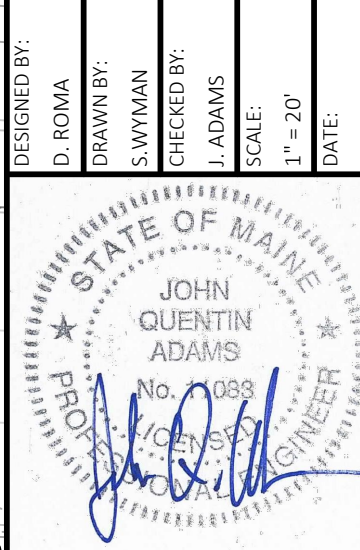


SHEET #
17 OF 35
PLAN NUMBER
PLN-1



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DESIGNED BY: D. ROMA
DRAWN BY: S. WYMAN
CHECKED BY: J. ADAMS
SCALE: 1" = 20'
DATE: APRIL 29, 2015

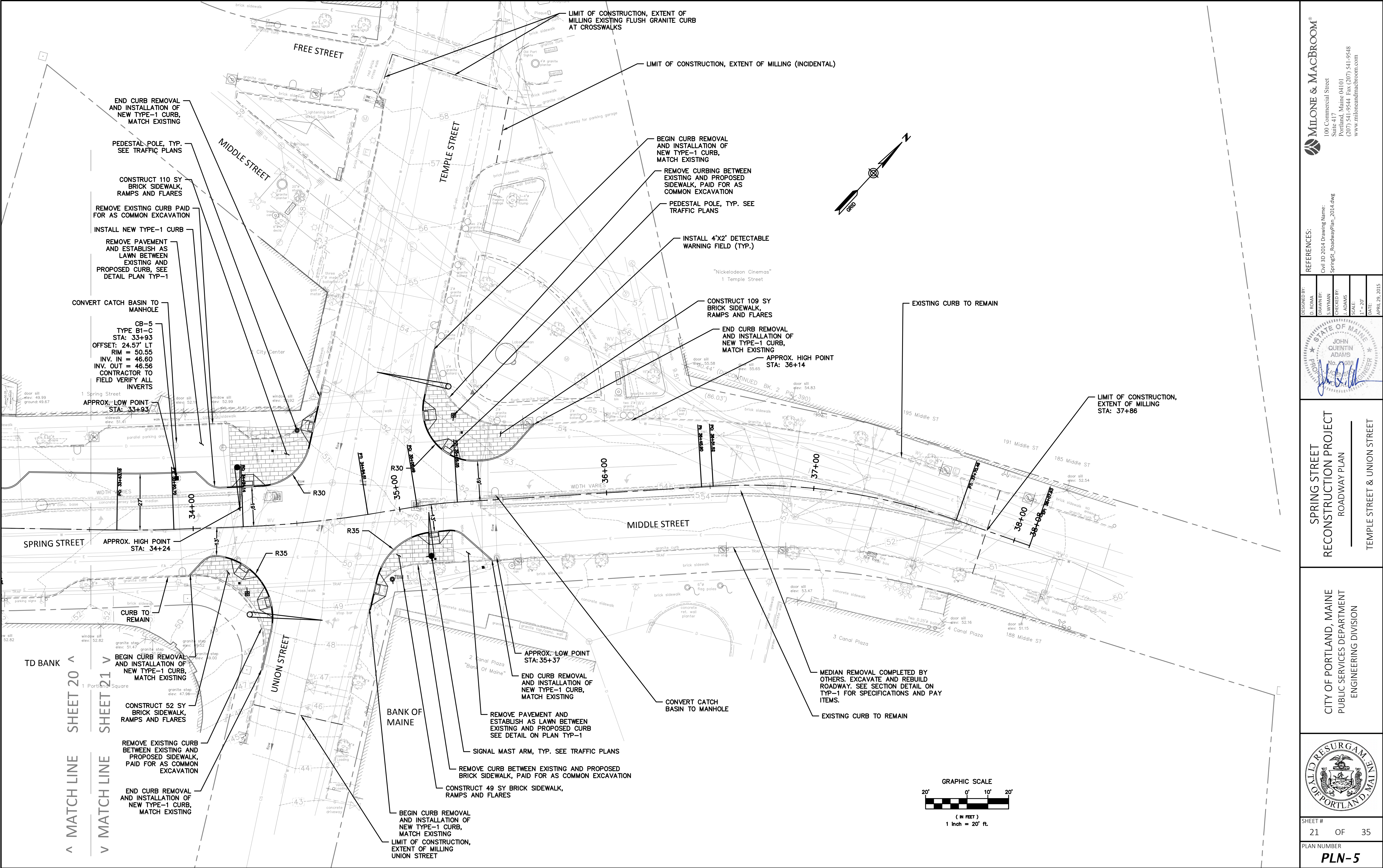


SPRING STREET
RECONSTRUCTION PROJECT
ROADWAY PLAN
CIVIC CENTER TO CENTER STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #
19 OF 35
PLAN NUMBER
PLN-3



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REFERENCES:
Civil 3D 2014 Drawing Name:
SpringSt_RoadwayPlan_2014.dwg

DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
1" = 20'

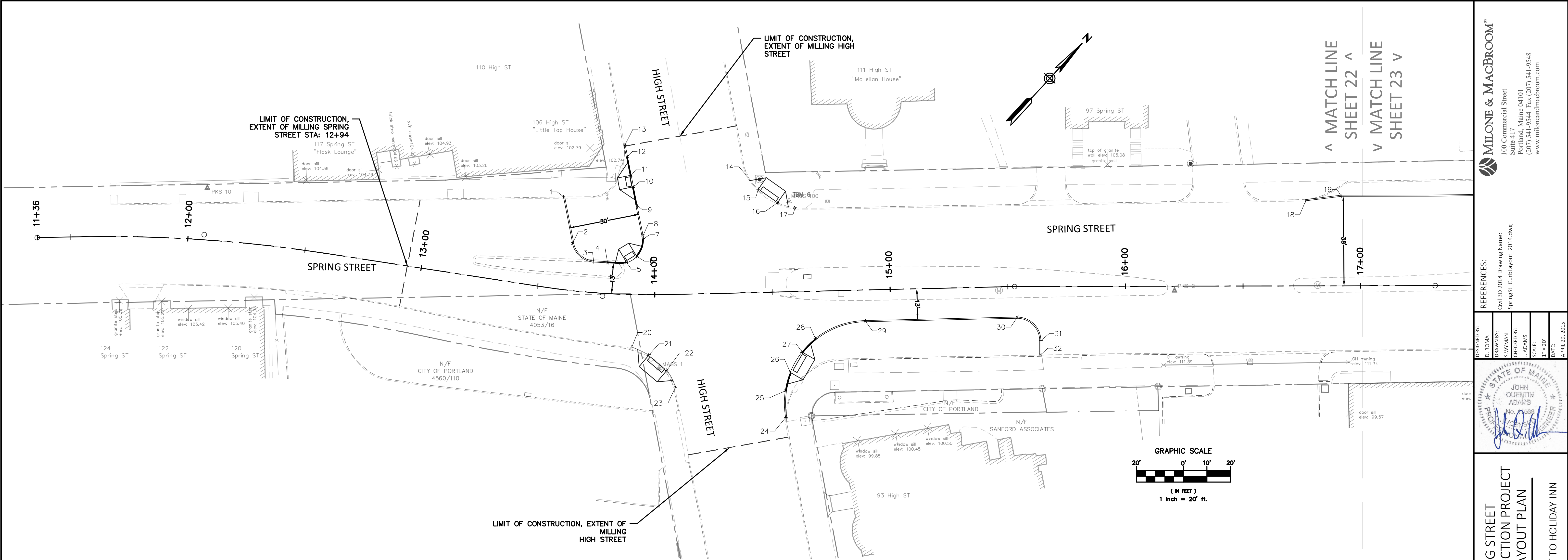
DATE:
APRIL 29, 2015

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 0888
Professional Engineer

SPRING STREET
RECONSTRUCTION PROJECT
ROADWAY PLAN

TEMPLE STREET & UNION STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



CURB LAYOUT DATA				
POINT #	STATION	OFFSET	NORTHING	EASTING
1	13+55.65	-39.15 L	298803.1781	2927494.9891
2	13+62.66	-20.12 L	298791.3454	2927511.1802
3	13+72.98	-13.00 L	298791.5495	2927523.2507
4	13+79.18	-13.00 L	298795.2555	2927527.8782
5	13+87.64	-13.54 L	298800.8800	2927533.7157
6	13+92.07	-16.25 L	298805.6869	2927535.0916
7	13+94.99	-23.81 L	298813.1287	2927532.0547
8	13+94.79	-25.18 L	298814.0216	2927530.9954
9	13+91.79	-37.96 L	298821.7268	2927520.4522
10	13+89.81	-45.77 L	298826.4459	2927513.9950
11	13+88.50	-50.65 L	298829.3961	2927509.9581
12	13+86.29	-58.48 L	298834.1382	2927503.4693
13	13+84.76	-63.63 L	298837.2569	2927499.2020
14	14+39.92	-50.03 L	298862.6151	2927545.6499
15	14+44.97	-43.82 L	298861.6659	2927553.5987
16	14+53.02	-37.88 L	298862.9982	2927563.5096
17	14+60.44	-35.58 L	298866.5060	2927570.4458
18	16+76.66	-36.12 L	299015.9196	2927727.7717
19	16+91.79	-38.00 L	299027.5879	2927737.5781
20	13+90.75	22.26 R	298776.0105	2927559.6669

CURB LAYOUT DATA				
POINT #	STATION	OFFSET	NORTHING	EASTING
21	13+97.48	25.59 R	298778.4203	2927567.2904
22	14+04.39	32.13 R	298778.8779	2927577.2799
23	14+07.87	39.32 R	298776.1334	2927584.7801
24	14+54.43	53.34 R	298798.4488	2927627.9819
25	14+54.53	42.04 R	298806.6315	2927620.1994
26	14+56.82	34.30 R	298813.7848	2927616.4510
27	14+62.01	25.75 R	298823.5356	2927614.2326
28	14+67.83	20.15 R	298831.6065	2927614.5174
29	14+89.02	13.00 R	298851.4889	2927624.7725
30	15+53.93	12.98 R	298896.5137	2927671.2999
31	15+64.05	23.00 R	298895.9853	2927685.4322
32	15+64.05	28.94 R	298891.6307	2927689.4728

ITEM 609.238 TERMINAL CURB TYPE-1 8 FT.				
POINT	TO	POINT	SIDE	LENGTH (LF)
9	TO	10	L	8.00
11	TO	12	L	8.00

ITEM 609.2381 TERMINAL CURB TYPE-1 8 FT. - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
4	TO	5	L	8.00	10
6	TO	7	L	8.00	10
25	TO	26	R	8.00	35
27	TO	28	R	8.00	35

ITEM 609.11 VERTICAL CURB				
POINT	TO	POINT	SIDE	LENGTH (LF)
1	TO	2	L	20.05
3	TO	4	L	5.93
8	TO	9	L	13.06
12	TO	13	L	5.29
18	TO	19	L	15.24
29	TO	30	R	64.75
31	TO	32	R	5.94

ITEM 609.11 FLUSH CURB				
POINT	TO	POINT	SIDE	LENGTH (LF)
10	TO	11	L	5.00

ITEM 609.12 VERTICAL CURB - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
2	TO	3	L	12.96	10
7	TO	8	L	1.39	10
24	TO	25	R	11.34	35
28	TO	29	R	22.77	35
30	TO	31	R	15.71	10

ITEM 609.12 FLUSH CURB - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
5	TO	6	L	5.00	10
26	TO	27	R	10.00	10

DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
1" = 20'

DATE:
APRIL 29, 2015

REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_CurbLayout_2015.dwg

STATE OF MAINE
PROFESSIONAL ENGINEER
JOHN QUENTIN ADAMS
No. 0383
Professional Seal

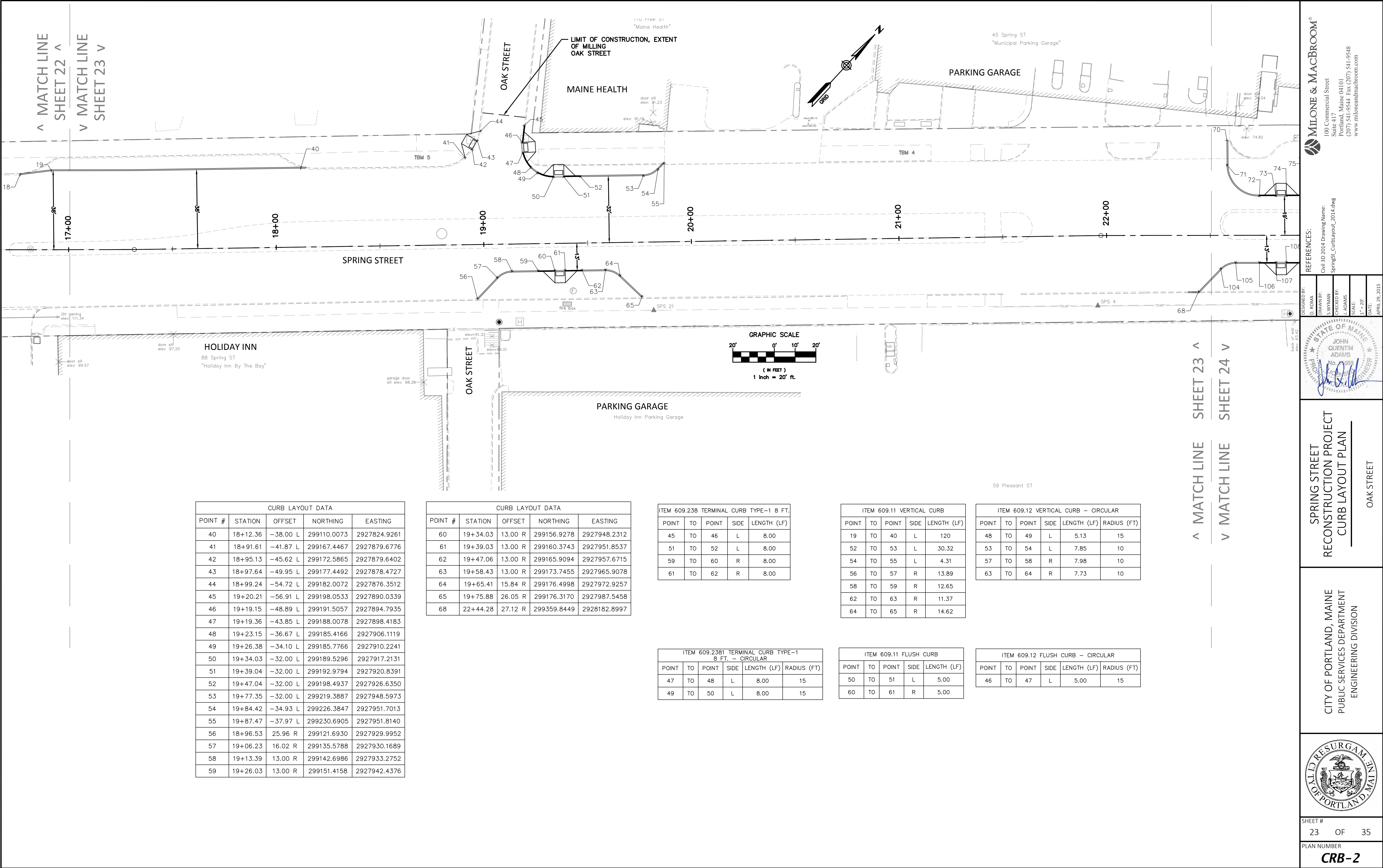
SPRING STREET
RECONSTRUCTION PROJECT
CURB LAYOUT PLAN
HIGH STREET TO HOLIDAY INN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SEAL OF THE
CITY OF PORTLAND, MAINE

SHEET #
22 OF 35
PLAN NUMBER
CRB-1

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CURB LAYOUT DATA				
POINT #	STATION	OFFSET	NORTHING	EASTING
40	18+12.36	-38.00 L	299110.0073	2927824.9261
41	18+91.61	-41.87 L	299167.4467	2927879.6776
42	18+95.13	-45.62 L	299172.5865	2927879.6402
43	18+97.64	-49.95 L	299177.4492	2927878.4727
44	18+99.24	-54.72 L	299182.0072	2927876.3512
45	19+20.21	-56.91 L	299198.0533	2927890.0339
46	19+19.15	-48.89 L	299191.5057	2927894.7935
47	19+19.36	-43.85 L	299188.0078	2927898.4183
48	19+23.15	-36.67 L	299185.4166	2927906.1119
49	19+26.38	-34.10 L	299185.7766	2927910.2241
50	19+34.03	-32.00 L	299189.5296	2927917.2131
51	19+39.04	-32.00 L	299192.9794	2927920.8391
52	19+47.04	-32.00 L	299198.4937	2927926.6350
53	19+77.35	-32.00 L	299219.3887	2927948.5973
54	19+84.42	-34.93 L	299226.3847	2927951.7013
55	19+87.47	-37.97 L	299230.6905	2927951.8140
56	18+96.53	25.96 R	299121.6930	2927929.9952
57	19+06.23	16.02 R	299135.5788	2927930.1689
58	19+13.39	13.00 R	299142.6986	2927933.2752
59	19+26.03	13.00 R	299151.4158	2927942.4376

CURB LAYOUT DATA				
POINT #	STATION	OFFSET	NORTHING	EASTING
60	19+34.03	13.00 R	299156.9278	2927948.2312
61	19+39.03	13.00 R	299160.3743	2927951.8537
62	19+47.06	13.00 R	299165.9094	2927957.6715
63	19+58.43	13.00 R	299173.7455	2927965.9078
64	19+65.41	15.84 R	299176.4998	2927972.9257
65	19+75.88	26.05 R	299176.3170	2927987.5458
68	22+44.28	27.12 R	299359.8449	2928182.8997

ITEM 609.238 TERMINAL CURB TYPE-1 8 FT.					
POINT	TO	POINT	SIDE	LENGTH (LF)	
45	TO	46	L	8.00	
51	TO	52	L	8.00	
59	TO	60	R	8.00	
61	TO	62	R	8.00	

ITEM 609.2381 TERMINAL CURB TYPE-1 8 FT. - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
47	TO	48	L	8.00	15
49	TO	50	L	8.00	15

ITEM 609.11 VERTICAL CURB					
POINT	TO	POINT	SIDE	LENGTH (LF)	
19	TO	40	L	120	
52	TO	53	L	30.32	
54	TO	55	L	4.31	
56	TO	57	R	13.89	
58	TO	59	R	12.65	
62	TO	63	R	11.37	
64	TO	65	R	14.62	

ITEM 609.11 FLUSH CURB					
POINT	TO	POINT	SIDE	LENGTH (LF)	
50	TO	51	L	5.00	
60	TO	61	R	5.00	

ITEM 609.12 VERTICAL CURB - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
48	TO	49	L	5.13	15
53	TO	54	L	7.85	10
57	TO	58	R	7.98	10
63	TO	64	R	7.73	10

ITEM 609.12 FLUSH CURB - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
46	TO	47	L	5.00	15

DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
1" = 20'

DATE:
APRIL 29, 2015

REFERENCES:
Civil 3D 2014 Drawing Name:
SpringSt_CurbLayout_2014.dwg

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 0883
Professional Engineer

SEAL

DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
1" = 20'

DATE:
APRIL 29, 2015

SPRING STREET
RECONSTRUCTION PROJECT
CURB LAYOUT PLAN

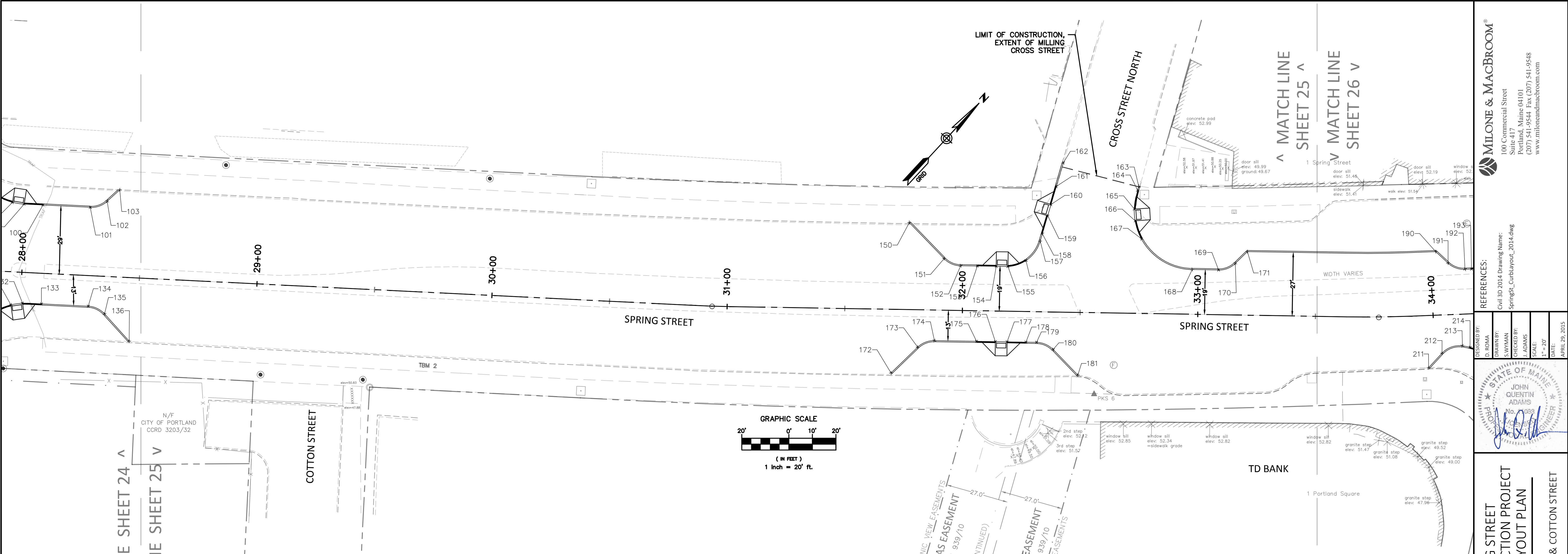
OAK STREET

SEAL OF THE CITY OF PORTLAND, MAINE
OFFICE OF THE ENGINEER

SEAL OF THE CITY OF PORTLAND, MAINE
OFFICE OF THE ENGINEER

SHEET #
23 OF 35

PLAN NUMBER
CRB-2



CURB LAYOUT DATA				
POINT #	STATION	OFFSET	NORTHING	EASTING
150	31+76.81	-36.99 L	300026.3528	2928836.9265
151	31+91.87	-21.93 L	300025.1605	2928858.1868
152	31+98.94	-19.00 L	300027.6890	2928865.4108
153	32+06.04	-19.00 L	300032.4175	2928870.7011
154	32+14.04	-19.00 L	300037.7496	2928876.6668
155	32+19.04	-19.03 L	300041.1040	2928880.3746
156	32+26.64	-21.68 L	300048.1441	2928884.2793
157	32+32.54	-29.99 L	300058.2729	2928883.1407
158	32+33.42	-33.15 L	300061.2148	2928881.6884
159	32+35.56	-40.86 L	300068.3882	2928878.1469
160	32+36.90	-45.68 L	300072.8715	2928875.9334
161	32+39.04	-53.38 L	300080.0450	2928872.3919
162	32+41.84	-63.49 L	300089.4510	2928867.7482
163	32+73.98	-54.02 L	300103.8123	2928898.0218
164	32+73.58	-52.26 L	300102.2245	2928898.8931
165	32+72.33	-44.30 L	300095.4579	2928903.2657
166	32+72.77	-39.32 L	300092.0376	2928906.9130
167	32+75.54	-31.74 L	300088.2317	2928914.0319
168	32+97.32	-19.00 L	300093.2527	2928938.7647
169	33+08.52	-19.00 L	300100.7142	2928947.1128

CURB LAYOUT DATA				
POINT #	STATION	OFFSET	NORTHING	EASTING
170	33+15.59	-21.93 L	300107.6102	2928950.4330
171	33+20.66	-27.00 L	300114.7705	2928950.8345
172	31+70.11	27.05 R	299974.1437	2928874.6069
173	31+81.24	15.93 R	299989.8481	2928875.4875
174	31+88.31	13.00 R	299996.7441	2928878.8078
175	32+06.21	13.00 R	300008.6742	2928892.1554
176	32+14.21	13.00 R	300014.0054	2928898.1201
177	32+19.21	13.00 R	300017.3375	2928901.8481
178	32+27.21	13.00 R	300022.6687	2928907.8128
179	32+31.72	13.00 R	300025.6773	2928911.1788
180	32+38.80	15.93 R	300028.2057	2928918.4028
181	32+49.49	26.62 R	300027.3590	2928933.5014

ITEM 609.238 TERMINAL CURB TYPE-1 8 FT.				
POINT	TO	POINT	SIDE	LENGTH (LF)
153	TO	154	L	8.00
158	TO	159	L	8.00
160	TO	161	L	8.00
175	TO	176	R	8.00
177	TO	178	R	8.00

ITEM 609.2381 TERMINAL CURB TYPE-1 8 FT. - CIRCULAR					
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)
155	TO	156	L	8.00	15
164	TO	165	L	8.00	25
166	TO	167	L	8.00	25

ITEM 609.11 VERTICAL CURB					
POINT	TO	POINT	SIDE	LENGTH (LF)	
150	TO	151	L	21.29	
152	TO	153	L	7.10	
157	TO	158	L	3.28	
161	TO	162	L	10.49	
163	TO	164	L	1.81	
168	TO	169	L	11.20	
170	TO	171	L	7.17	
171	TO	190	L	80.00	
172	TO	173	R	15.73	
174	TO	175	R	17.90	
178	TO	179	R	4.51	
180	TO	181	R	15.12	

ITEM 609.11 FLUSH CURB					
POINT	TO	POINT	SIDE	LENGTH (LF)	
154	TO	155	L	5.00	
159	TO	160	L	5.00	
176	TO	177	R	5.00	

ITEM 609.12 VERTICAL CURB - CIRCULAR						
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)	
151	TO	152	L	7.85	10	
156	TO	157	L	10.40	15	
167	TO	168	L	26.45	25	
169	TO	170	L	7.85	10	
173	TO	174	R	7.85	10	
179	TO	180	R	7.85	10	

ITEM 609.12 FLUSH CURB CIRCULAR						
POINT	TO	POINT	SIDE	LENGTH (LF)	RADIUS (FT)	
165	TO	166	L	5.00	25	

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REFERENCES:
Civil 3D 2014 Drawing Name:
SpringSt_CurbLayout_2014.dwg

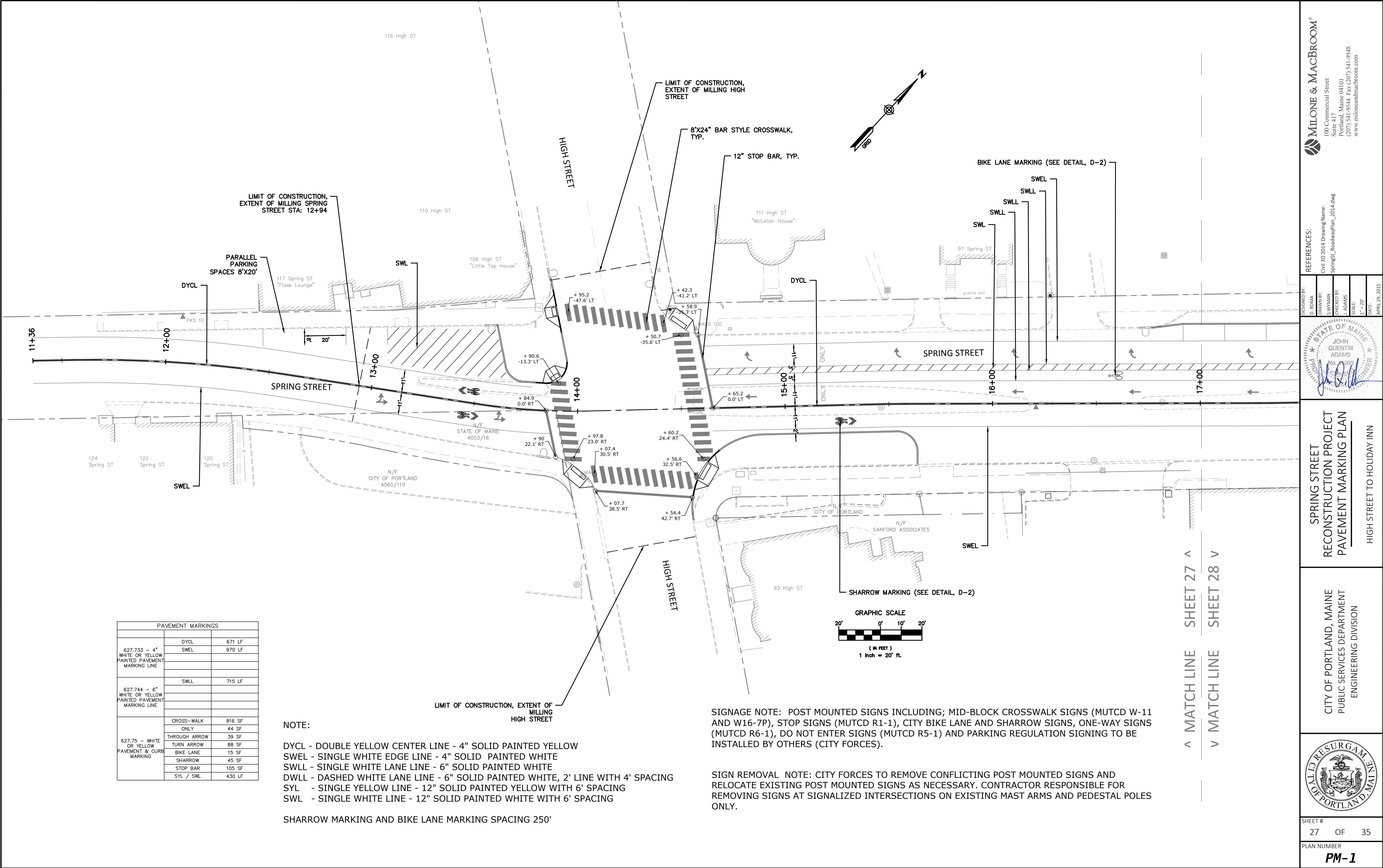
DESIGNED BY: D. ROMA
DRAWN BY: S. WYMAN
CHECKED BY: J. ADAMS
SCALE: 1" = 20'
DATE: APRIL 29, 2015

JOHN QUENTIN ADAMS
No. 08938
Professional Engineer
State of Maine

SPRING STREET
RECONSTRUCTION PROJECT
CURB LAYOUT PLAN
CENTER STREET & COTTON STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SHEET #
25 OF 35
PLAN NUMBER
CRB-4



PAVEMENT MARKINGS		
627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	DYCL	671 LF
	SWEL	970 LF
627.744 - 6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	SWLL	715 LF
627.75 - WHITE OR YELLOW PAVEMENT & CURB MARKING	CROSS-WALK ONLY	816 SF
	TURN ARROW	44 SF
	THROUGH ARROW	39 SF
	BIKE LANE	88 SF
	SHARROW	15 SF
	STOP BAR	45 SF
	SYL / SWL	105 SF
		430 LF

NOTE:

- DYCL - DOUBLE YELLOW CENTER LINE - 4" SOLID PAINTED YELLOW
- SWEL - SINGLE WHITE EDGE LINE - 4" SOLID PAINTED WHITE
- SWLL - SINGLE WHITE LANE LINE - 6" SOLID PAINTED WHITE
- DWLL - DASHED WHITE LANE LINE - 6" SOLID PAINTED WHITE, 2' LINE WITH 4' SPACING
- SYL - SINGLE YELLOW LINE - 12" SOLID PAINTED YELLOW WITH 6' SPACING
- SWL - SINGLE WHITE LINE - 12" SOLID PAINTED WHITE WITH 6' SPACING

SHARROW MARKING AND BIKE LANE MARKING SPACING 250'

SIGNAGE NOTE: POST MOUNTED SIGNS INCLUDING; MID-BLOCK CROSSWALK SIGNS (MUTCD W-11 AND W16-7P), STOP SIGNS (MUTCD R1-1), CITY BIKE LANE AND SHARROW SIGNS, ONE-WAY SIGNS (MUTCD R6-1), DO NOT ENTER SIGNS (MUTCD R5-1) AND PARKING REGULATION SIGNING TO BE INSTALLED BY OTHERS (CITY FORCES).

SIGN REMOVAL NOTE: CITY FORCES TO REMOVE CONFLICTING POST MOUNTED SIGNS AND RELOCATE EXISTING POST MOUNTED SIGNS AS NECESSARY. CONTRACTOR RESPONSIBLE FOR REMOVING SIGNS AT SIGNALIZED INTERSECTIONS ON EXISTING MAST ARMS AND PEDESTAL POLES ONLY.

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REFERENCES:
Civil 3D 2014 Drawing Name:
SpringSt_RoadwayPlan_2014.dwg

DESIGNED BY: D. ROMA
DRAWN BY: S. WYMAN
CHECKED BY: J. ADAMS
SCALE: 1" = 20'
DATE: APRIL 29, 2015

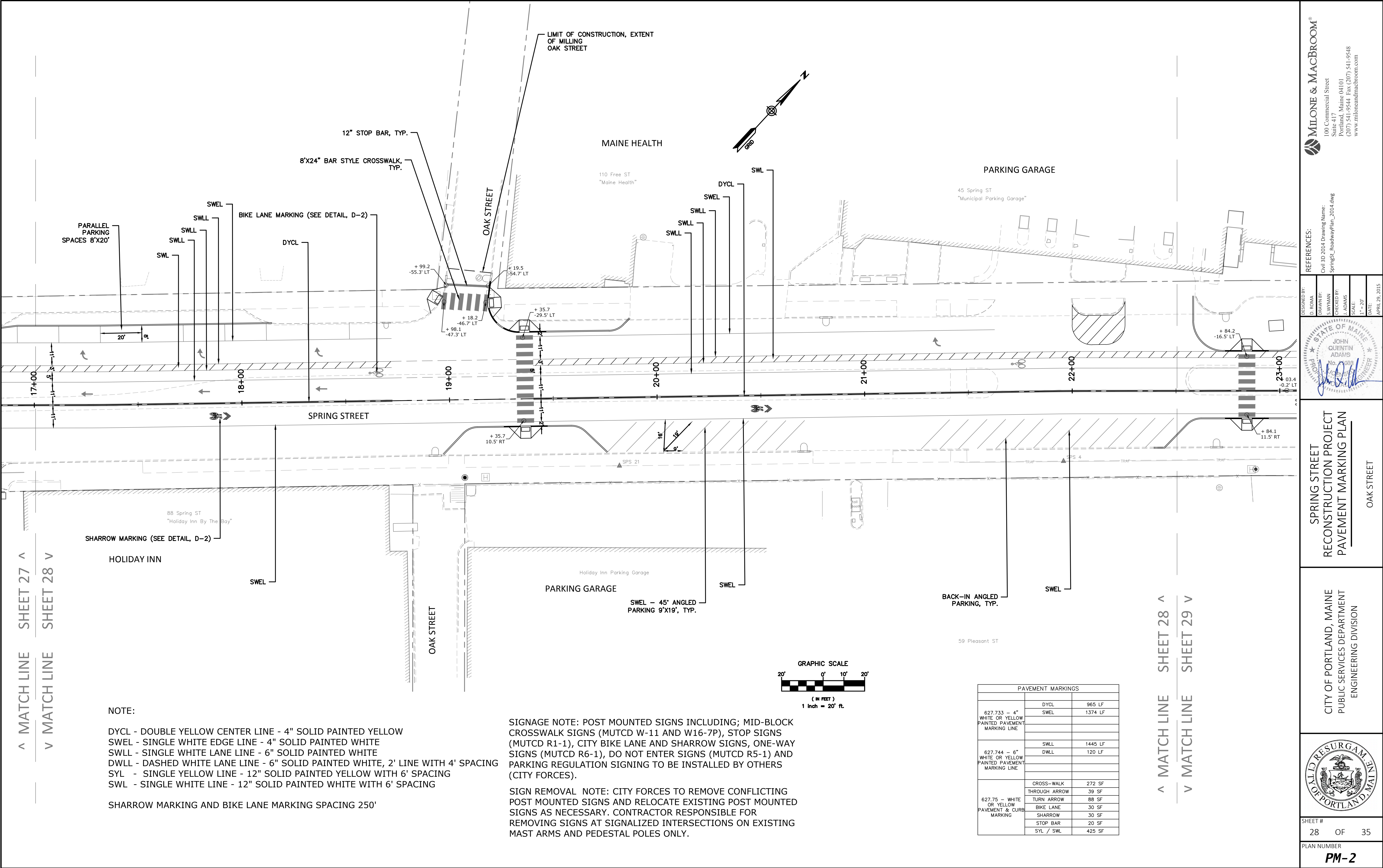
JOHN QUENTIN ADAMS
No. 1088
MAINE
Professional Engineer

SPRING STREET
RECONSTRUCTION PROJECT
PAVEMENT MARKING PLAN
HIGH STREET TO HOLIDAY INN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SEAL OF THE CITY OF PORTLAND, MAINE

SHEET #
27 OF 35
PLAN NUMBER
PM-1



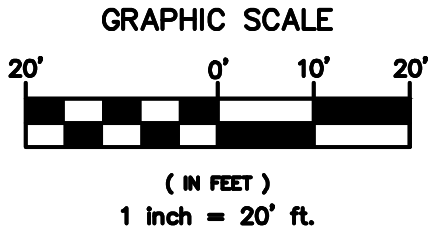
NOTE:

- DYCL - DOUBLE YELLOW CENTER LINE - 4" SOLID PAINTED YELLOW
- SWEL - SINGLE WHITE EDGE LINE - 4" SOLID PAINTED WHITE
- SWLL - SINGLE WHITE LANE LINE - 6" SOLID PAINTED WHITE
- DWLL - DASHED WHITE LANE LINE - 6" SOLID PAINTED WHITE, 2' LINE WITH 4' SPACING
- SYL - SINGLE YELLOW LINE - 12" SOLID PAINTED YELLOW WITH 6' SPACING
- SWL - SINGLE WHITE LINE - 12" SOLID PAINTED WHITE WITH 6' SPACING

SHARROW MARKING AND BIKE LANE MARKING SPACING 250'

SIGNAGE NOTE: POST MOUNTED SIGNS INCLUDING; MID-BLOCK CROSSWALK SIGNS (MUTCD W-11 AND W16-7P), STOP SIGNS (MUTCD R1-1), CITY BIKE LANE AND SHARROW SIGNS, ONE-WAY SIGNS (MUTCD R6-1), DO NOT ENTER SIGNS (MUTCD R5-1) AND PARKING REGULATION SIGNING TO BE INSTALLED BY OTHERS (CITY FORCES).

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PAVEMENT MARKINGS		
627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	DYCL	965 LF
	SWEL	1374 LF
627.744 - 6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	SWLL	1445 LF
	DWLL	120 LF
627.75 - WHITE OR YELLOW PAVEMENT & CURB MARKING	CROSS-WALK	272 SF
	THROUGH ARROW	39 SF
	TURN ARROW	88 SF
	BIKE LANE	30 SF
	SHARROW	30 SF
	STOP BAR	20 SF
	SYL / SWL	425 SF

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REFERENCES:
Civil 3D 2014 Drawing Name:
SpringSt_RoadwayPlan_2014.dwg

DESIGNED BY:
D. ROMA

DRAWN BY:
S. WYMAN

CHECKED BY:
J. ADAMS

SCALE:
1" = 20'

DATE:
APRIL 29, 2015

JOHN QUENTIN ADAMS
No. 988
Professional Engineer
State of Maine

SPRING STREET
RECONSTRUCTION PROJECT
PAVEMENT MARKING PLAN

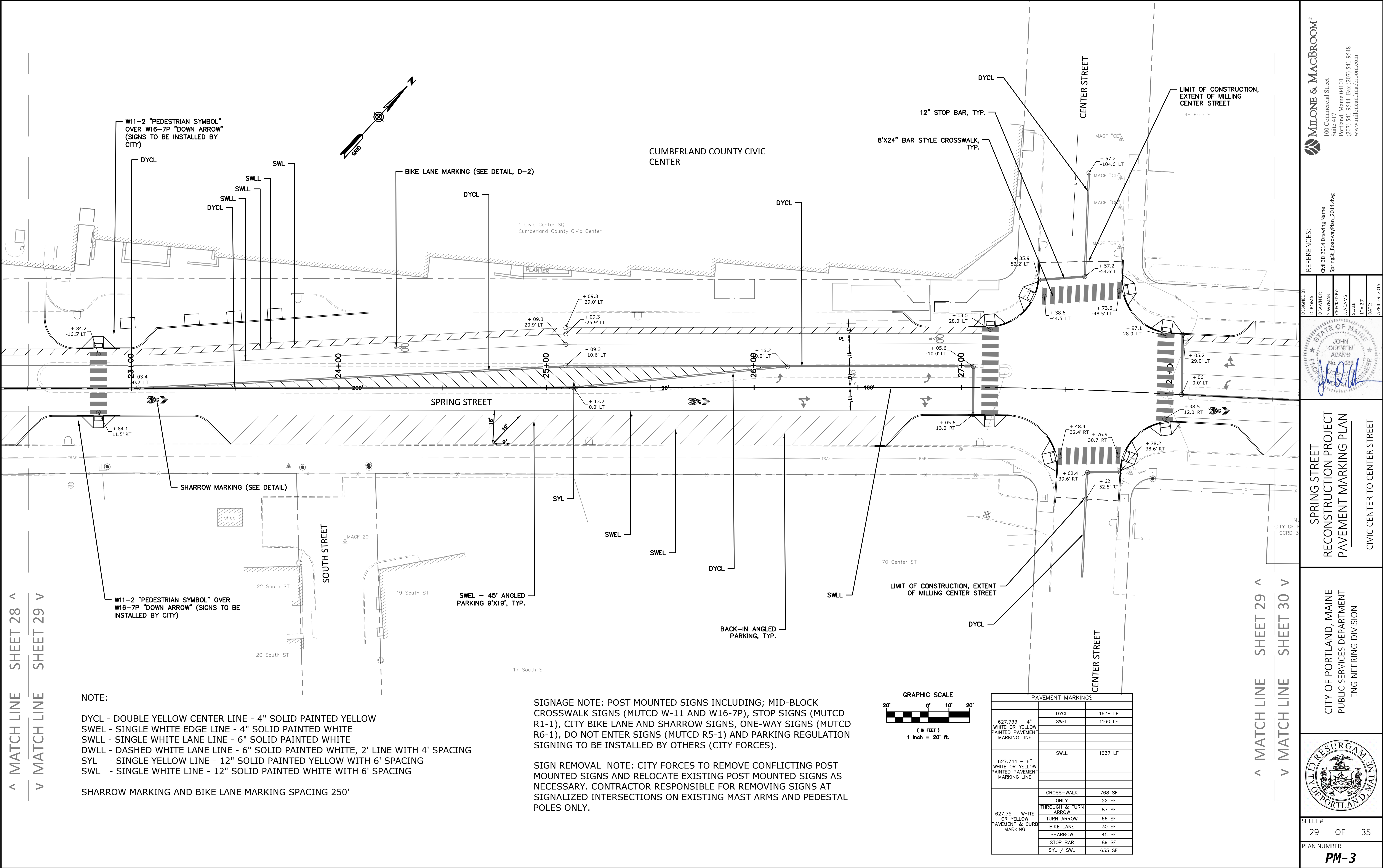
OAK STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SEAL OF THE CITY OF PORTLAND, MAINE

SHEET #
28 OF 35

PLAN NUMBER
PM-2



^ MATCH LINE SHEET 28 ^
v MATCH LINE SHEET 29 v

^ MATCH LINE SHEET 29 ^
v MATCH LINE SHEET 30 v

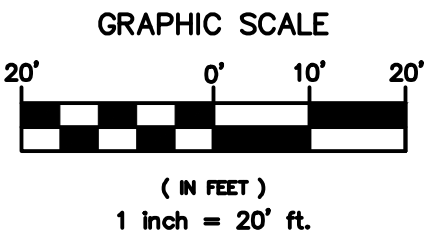
NOTE:

DYCL - DOUBLE YELLOW CENTER LINE - 4" SOLID PAINTED YELLOW
SWEL - SINGLE WHITE EDGE LINE - 4" SOLID PAINTED WHITE
SWLL - SINGLE WHITE LANE LINE - 6" SOLID PAINTED WHITE
DWLL - DASHED WHITE LANE LINE - 6" SOLID PAINTED WHITE, 2' LINE WITH 4' SPACING
SYL - SINGLE YELLOW LINE - 12" SOLID PAINTED YELLOW WITH 6' SPACING
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SHARROW MARKING AND BIKE LANE MARKING SPACING 250'

SIGNAGE NOTE: POST MOUNTED SIGNS INCLUDING; MID-BLOCK CROSSWALK SIGNS (MUTCD W-11 AND W16-7P), STOP SIGNS (MUTCD R1-1), CITY BIKE LANE AND SHARROW SIGNS, ONE-WAY SIGNS (MUTCD R6-1), DO NOT ENTER SIGNS (MUTCD R5-1) AND PARKING REGULATION SIGNING TO BE INSTALLED BY OTHERS (CITY FORCES).

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PAVEMENT MARKINGS		
627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	DYCL	1638 LF
	SWEL	1160 LF
627.744 - 6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	SWLL	1637 LF
627.75 - WHITE OR YELLOW PAVEMENT & CURB MARKING	CROSS-WALK ONLY	768 SF
	THROUGH & TURN ARROW	22 SF
	TURN ARROW	87 SF
	BIKE LANE	66 SF
	SHARROW	30 SF
	STOP BAR	45 SF
	SYL / SWL	89 SF
		655 SF

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REFERENCES:
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SpringSt_RoadwayPlan_2014.dwg

DESIGNED BY: D. ROMA
DRAWN BY: S. WYMAN
CHECKED BY: J. ADAMS
SCALE: 1"=20'
DATE: APRIL 29, 2015

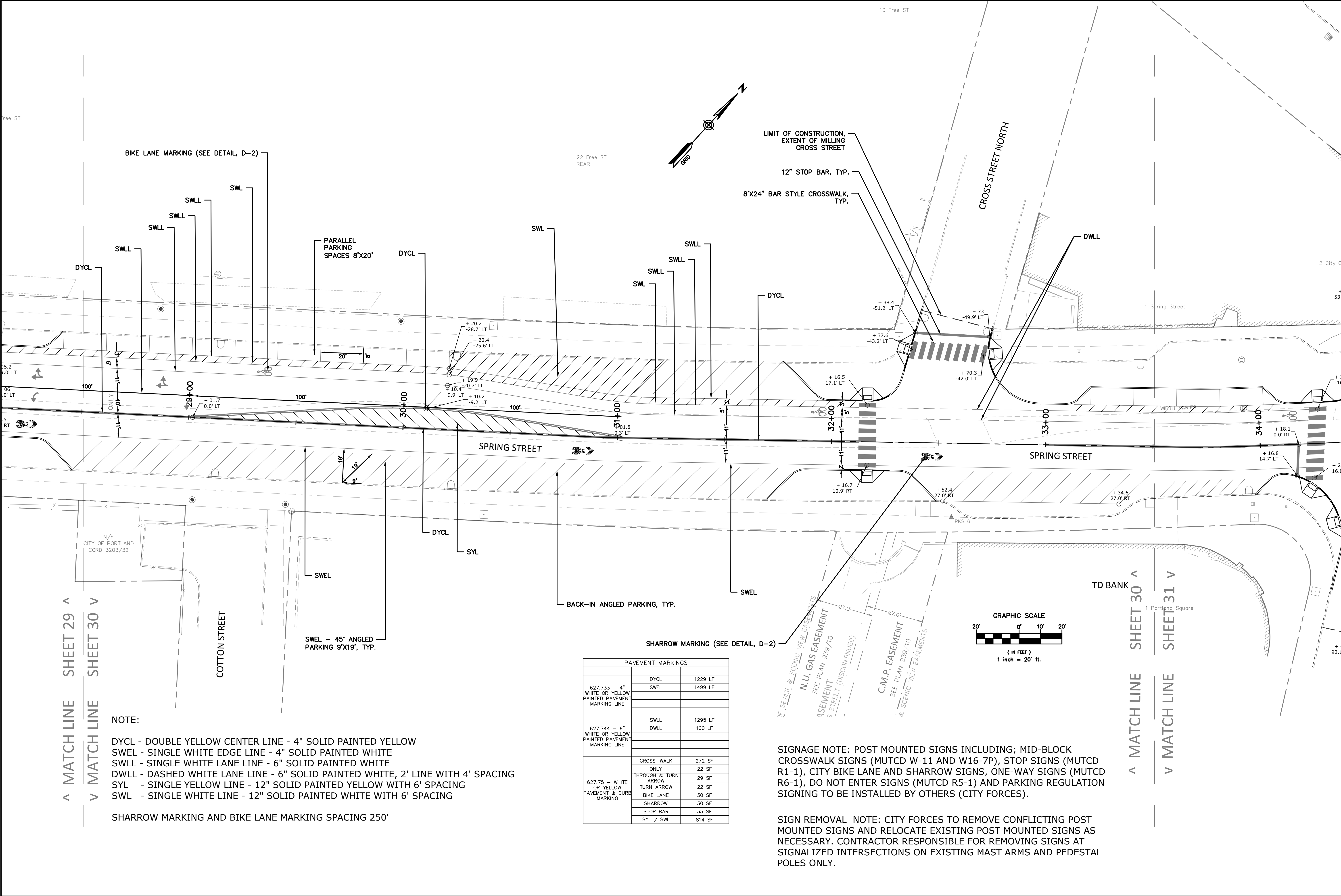
SPRING STREET
RECONSTRUCTION PROJECT
PAVEMENT MARKING PLAN

CIVIC CENTER TO CENTER STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SHEET #
29 OF 35

PLAN NUMBER
PM-3



^ MATCH LINE SHEET 29 ^
v MATCH LINE SHEET 30 v

NOTE:
DYCL - DOUBLE YELLOW CENTER LINE - 4" SOLID PAINTED YELLOW
SWEL - SINGLE WHITE EDGE LINE - 4" SOLID PAINTED WHITE
SWLL - SINGLE WHITE LANE LINE - 6" SOLID PAINTED WHITE
DWLL - DASHED WHITE LANE LINE - 6" SOLID PAINTED WHITE, 2' LINE WITH 4' SPACING
SYL - SINGLE YELLOW LINE - 12" SOLID PAINTED YELLOW WITH 6' SPACING
SWL - SINGLE WHITE LINE - 12" SOLID PAINTED WHITE WITH 6' SPACING

SHARROW MARKING AND BIKE LANE MARKING SPACING 250'

PAVEMENT MARKINGS		
627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	DYCL	1229 LF
	SWEL	1499 LF
627.744 - 6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	SWLL	1295 LF
	DWLL	160 LF
627.75 - WHITE OR YELLOW PAVEMENT & CURB MARKING	CROSS-WALK	272 SF
	ONLY	22 SF
	THROUGH & TURN ARROW	29 SF
	TURN ARROW	22 SF
	BIKE LANE	30 SF
	SHARROW	30 SF
	STOP BAR	35 SF
	SYL / SWL	814 SF

SIGNAGE NOTE: POST MOUNTED SIGNS INCLUDING; MID-BLOCK CROSSWALK SIGNS (MUTCD W-11 AND W16-7P), STOP SIGNS (MUTCD R1-1), CITY BIKE LANE AND SHARROW SIGNS, ONE-WAY SIGNS (MUTCD R6-1), DO NOT ENTER SIGNS (MUTCD R5-1) AND PARKING REGULATION SIGNING TO BE INSTALLED BY OTHERS (CITY FORCES).

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DESIGNED BY: D. ROMA
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SCALE: 1" = 20'
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STATE OF MAINE
JOHN QUENTIN ADAMS
No. 9883
Professional Engineer

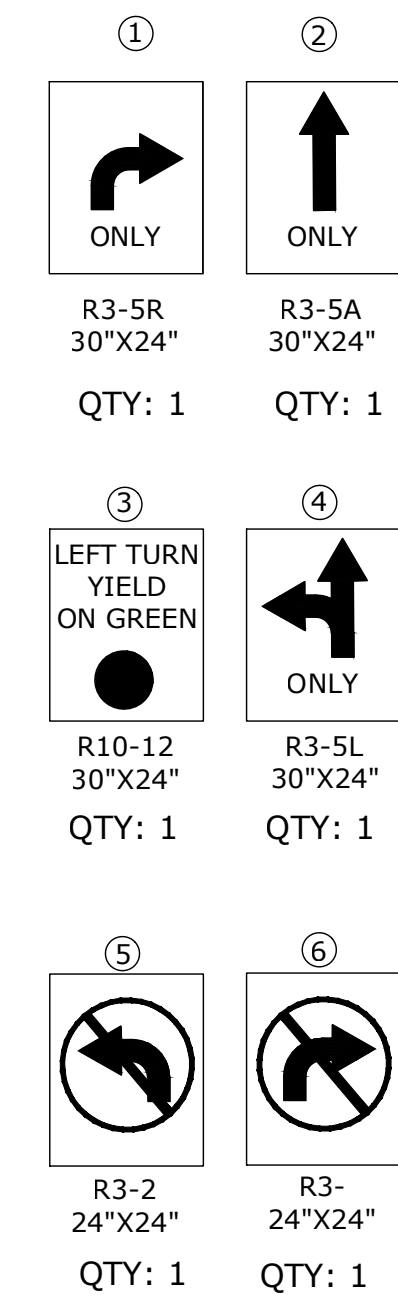
SPRING STREET
RECONSTRUCTION PROJECT
PAVEMENT MARKING PLAN
CENTER STREET & COTTON STREET

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

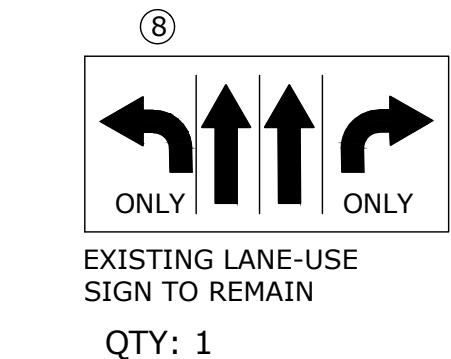
SHEET #
30 OF 35
PLAN NUMBER
PM-4

PROPOSED SIGN LEGEND

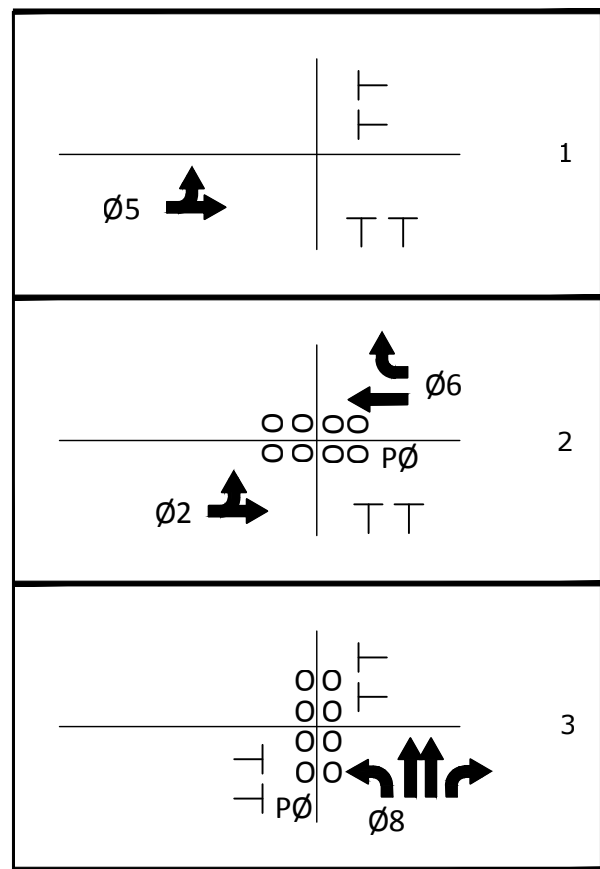
ALL SIGNS SUPPLIED BY CITY TRAFFIC DIVISION. SEE ITEM 645.271 NOTES UNDER SPRING ST. AT HIGH ST. ON SHEET 35



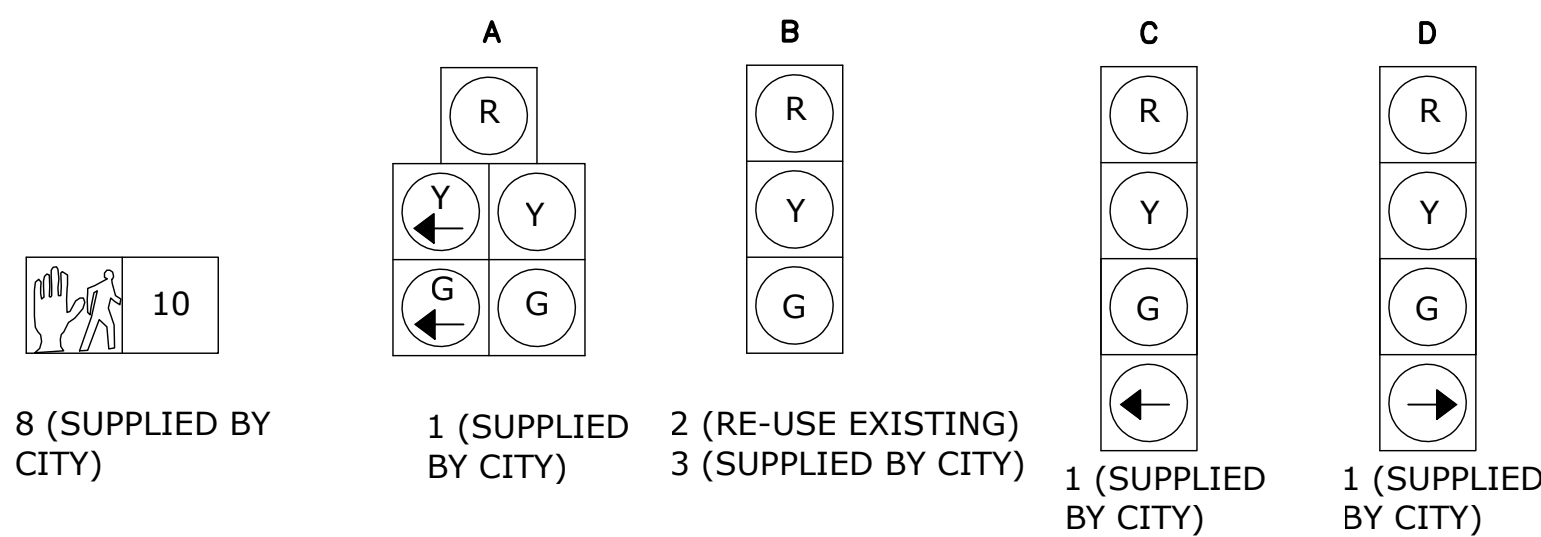
EXISTING SIGN LEGEND



TYPICAL PHASE SEQUENCE

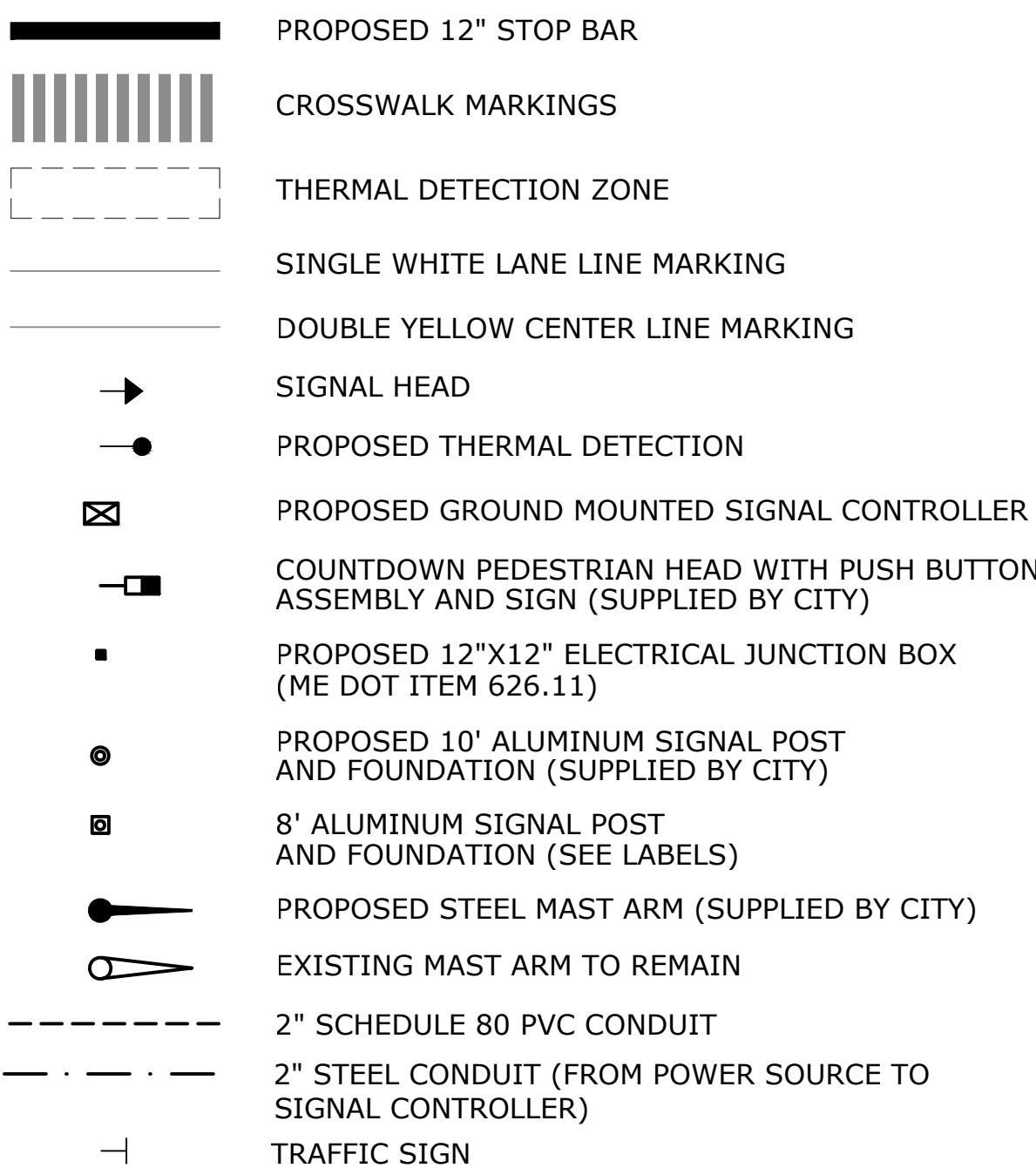


SIGNAL INDICATIONS



NOTE: ALL INDICATIONS SHALL BE 12 INCH LIGHT EMITTING DIODES WITH 5" BACK PLATES.

LEGEND



SIGNAL TIMING

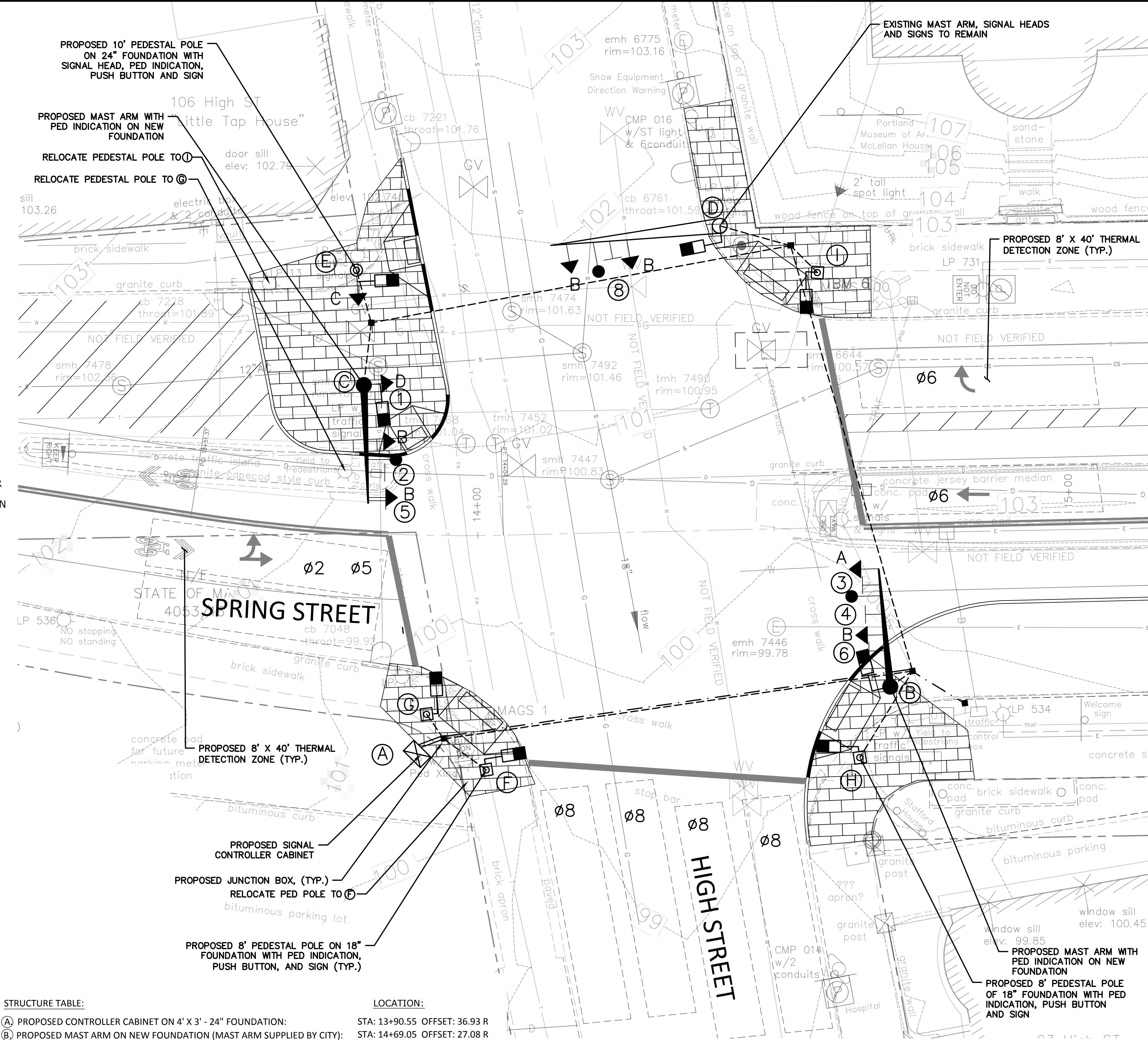
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MIN GREEN		5			3	5		5
EXTENSION		3			3	3		3
MAX I		20			10	20		30
MAX II*		45			10	55		15
VEH. CLEAR		3			3	3		3
RED CLEAR		2			2	2		2
WALK						5		5
PED CLEAR						15		13
DYNAMIC MAX		30			15	30		45
DYNAMIC STEP		5			5	5		5
RECALL		SOFT				SOFT		
DET. MEMORY		OFF			OFF	OFF		OFF
FLASH		Y				Y		R
DUAL ENTRY		ON				ON		

SIGNAL TIMING NOTES

1. SIGNAL TO OPERATE ON COLORS AT ALL TIMES
2. FLASH MODE IS FOR EMERGENCIES ONLY.
3. TIMES SHOWN ARE FOR FREE OPERATION ONLY.
4. PED PHASE TO TIME THROUGH THE YELLOW CLEARANCE.

* MAX II SPECIAL EVENTS PROGRAMS

1. INITIAL SUGGESTED PROGRAM DURING EXITING TRAFFIC TIMES FOR CIVIC CENTER EVENTS.
2. PROGRAM TO BE ADJUSTED IN FIELD TO OPTIMIZE EXITING TRAFFIC OPERATIONS (BY OTHERS).



STRUCTURE TABLE:

- (A) PROPOSED CONTROLLER CABINET ON 4' X 3' - 24" FOUNDATION:
- (B) PROPOSED MAST ARM ON NEW FOUNDATION (MAST ARM SUPPLIED BY CITY):
- (C) PROPOSED MAST ARM ON NEW FOUNDATION (MAST ARM SUPPLIED BY CITY):
- (D) EXISTING MAST ARM TO REMAIN:
- (E) PROPOSED 10' PEDESTAL POLE ON 24" FOUNDATION (SUPPLIED BY CITY):
- (F) PROPOSED 8' PEDESTAL POLE ON 18" FOUNDATION (SUPPLIED BY CITY):
- (G) PROPOSED 8' PEDESTAL POLE ON 18" FOUNDATION (SUPPLIED BY CITY):
- (H) PROPOSED 8' PEDESTAL POLE ON NEW 18" FOUNDATION (SUPPLIED BY CITY):
- (I) PROPOSED 8' PEDESTAL POLE ON NEW 18" FOUNDATION (SUPPLIED BY CITY):

LOCATION:

STA: 13+90.55 OFFSET: 36.93 R

STA: 14+69.05 OFFSET: 27.08 R

STA: 13+79.21 OFFSET: 24.93 L

STA: 14+42.07 OFFSET: 51.36 L

STA: 13+76.39 OFFSET: 44.22 L

STA: 14+00.92 OFFSET: 39.57 R

STA: 13+91.88 OFFSET: 30.19 R

STA: 14+63.62 OFFSET: 38.93 R

STA: 14+58.36 OFFSET: 43.10 L

SIGNAL COORDINATION PROGRAMMING:

1. CONTRACTOR TO CONFIRM EXISTING COORDINATION PROGRAMS FOR THIS TRAFFIC SIGNAL.
2. CONTRACTOR TO INSTALL EXISTING COORDINATION PROGRAMS IN PROPOSED SIGNAL CONTROLLER AND CONFIRM OPERATIONS AT SIGNAL TURN-ON.

SEE SHEET 35 OF 35 (TRA-4) FOR NOTES AND FURTHER DETAIL

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DESIGNED BY: D. ROMA
DRAWN BY: S. WYMAN
CHECKED BY: J. ADAMS
SCALE: 1"=10'
DATE: APRIL 29, 2015

REFERENCES:
Civil 3D 2014 Drawing Name: SpringSt_Traffic_2014.dwg

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 0088
Professional Engineer

SPRING STREET
RECONSTRUCTION PROJECT
TRAFFIC PLAN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SHIELD RESURGAM
OF PORTLAND, MAINE

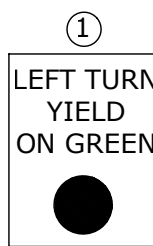
SHEET #
32 OF 35

PLAN NUMBER
TRA-1

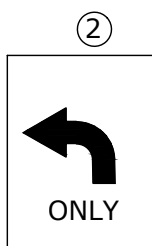
SIGN LEGEND

SIGNAL INDICATIONS

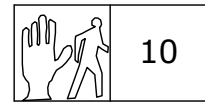
ALL SIGNS SUPPLIED BY CITY TRAFFIC DIVISION
SEE ITEM 645.271 NOTES UNDER SPRING ST. AT
CENTER ST. ON SHEET 35



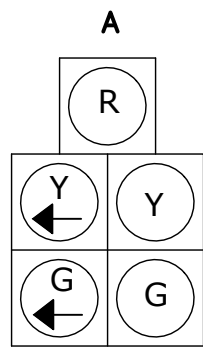
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QTY: 2



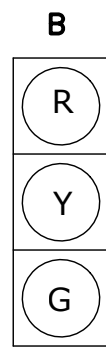
R3-5L
30"X24"
QTY: 2



QTY: 8 (RE-USE
EXISTING)



2 (SUPPLIED
BY CITY)



4 (RE-USE EXISTING)
2 (SUPPLIED BY CITY)

NOTE: ALL INDICATIONS SHALL BE 12
INCH LIGHT EMITTING DIODES WITH 5"
BACK PLATES.

SIGNAL TIMING

	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
MIN GREEN	5	10		5	5	10	Ø7	5
EXTENSION	3	3		2	3	3		2
MAX I	15	25		20	10	30		20
MAX II*	20	50		15	15	45		15
VEH. CLEAR	3	3		3	3	3		3
RED CLEAR	2	2		2	2	2		2
WALK		5		5				
PED CLEAR		14		13				
DYNAMIC MAX	20	35		25	15	40		25
DYNAMIC STEP	5	5		5	5	5		5
RECALL		SOFT				SOFT		
DET. MEMORY	OFF	OFF		OFF		OFF		OFF
FLASH	BLANK	Y		R		Y		R
DUAL ENTRY		ON				ON		

SIGNAL TIMING NOTES

1. SIGNAL TO OPERATE ON COLORS AT ALL TIMES
2. FLASH MODE IS FOR EMERGENCIES ONLY.
3. TIMES SHOWN ARE FOR FREE OPERATION ONLY.

* MAX II SPECIAL EVENTS PROGRAMS

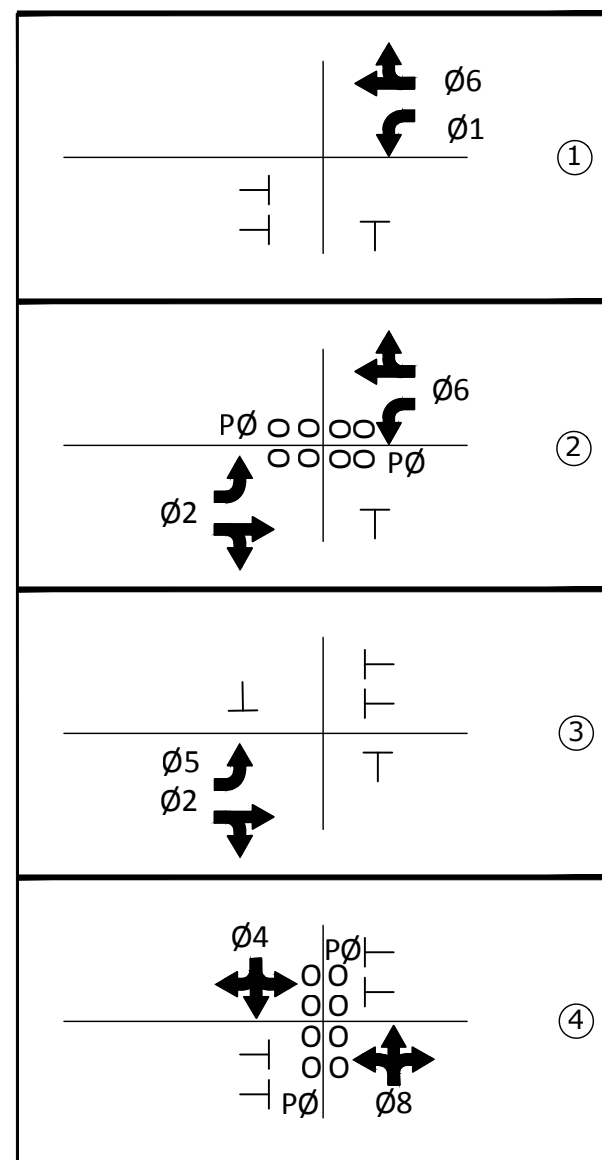
1. INITIAL SUGGESTED PROGRAM DURING EXITING TRAFFIC TIMES FOR CIVIC CENTER EVENTS.
2. PROGRAM TO BE ADJUSTED IN FIELD TO OPTIMIZE EXITING TRAFFIC OPERATIONS (BY OTHERS).

STRUCTURE TABLE:

LOCATION:

- (A) RELOCATE 10' PEDESTAL POLE ON NEW 24" FOUNDATION: STA: 27+28.05 OFFSET: 51.10 L
(B) RELOCATE 10' PEDESTAL POLE ON NEW 24" FOUNDATION: STA: 27+84.42 OFFSET: 47.33 L
(C) RELOCATE 8' PEDESTAL POLE ON NEW 18" FOUNDATION: STA: 28+01.42 OFFSET: 36.91 L
(D) RELOCATE EXISTING MAST ARM ON NEW FOUNDATION: STA: 28+04.66 OFFSET: 19.33 R
(E) RELOCATE 10' PEDESTAL POLE ON NEW 24" FOUNDATION: STA: 27+86.77 OFFSET: 35.99 R
(F) RELOCATE 10' PEDESTAL POLE ON NEW 24" FOUNDATION: STA: 27+38.00 OFFSET: 30.70 R
(G) RELOCATE 8' PEDESTAL POLE ON NEW 18" FOUNDATION: STA: 27+12.56 OFFSET: 20.51 R
(H) RELOCATE EXISTING MAST ARM ON NEW FOUNDATION: STA: 27+01.48 OFFSET: 31.73 L

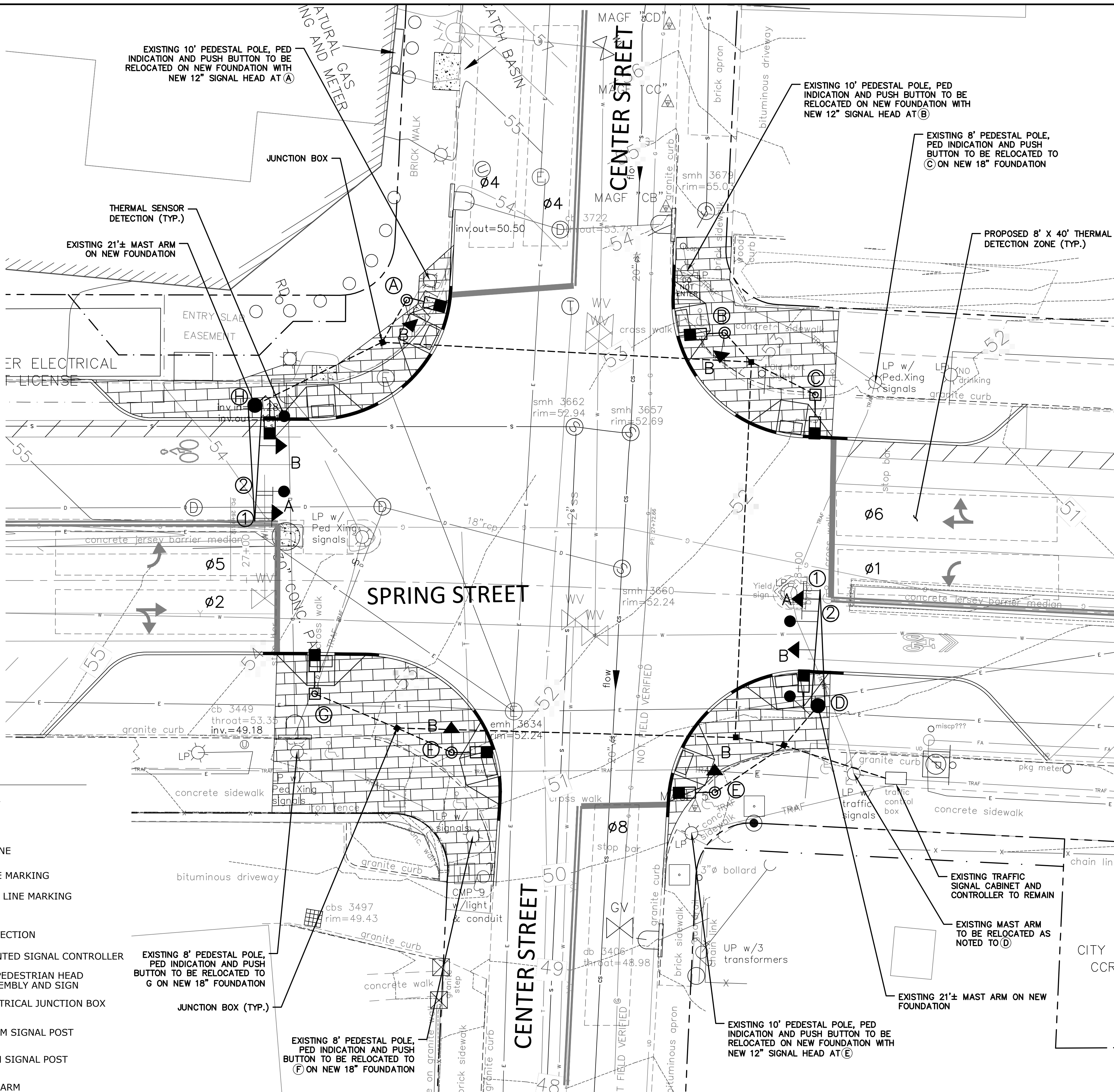
TYPICAL PHASE SEQUENCE



*DUAL RING OPERATION ON SPRING ST.

LEGEND

- PROPOSED 12" STOP BAR
- CROSSWALK MARKINGS
- THERMAL DETECTION ZONE
- SINGLE WHITE LANE LINE MARKING
- DOUBLE YELLOW CENTER LINE MARKING
- SIGNAL HEAD
- PROPOSED THERMAL DETECTION
- EXISTING GROUND MOUNTED SIGNAL CONTROLLER
- EXISTING COUNTDOWN PEDESTRIAN HEAD WITH PUSH BUTTON ASSEMBLY AND SIGN
- PROPOSED 12"X12" ELECTRICAL JUNCTION BOX (ME DOT ITEM 626.11)
- RELOCATED 10' ALUMINUM SIGNAL POST AND FOUNDATION
- RELOCATED 8' ALUMINUM SIGNAL POST AND FOUNDATION
- RELOCATED STEEL MAST ARM
- 2" SCHEDULE 80 PVC CONDUIT
- TRAFFIC SIGN



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www.miloneandmacbroom.com

REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_Traffic_2014.dwg

DESIGNED BY:

D. ROMA

DRAWN BY:

S. WYMAN

CHECKED BY:

J. ADAMS

SCALE:

1" = 10'

DATE:

APRIL 29, 2015

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 0088
Professional Engineer
Professional Seal

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #

33

OF

35

PLAN NUMBER

TRA-2

SEE SHEET 35 OF 35 (TRA-4) FOR NOTES AND FURTHER DETAIL

SIGN LEGEND

ALL SIGNS SUPPLIED BY CITY TRAFFIC DIVISION
SEE ITEM 645.271 NOTES UNDER SPRING ST. AT
TEMPLE ST. AND UNION ST. ON SHEET 35.

NOTE: ALL INDICATIONS SHALL BE 12
INCH LIGHT EMITTING DIODES WITH 5"
BACK PLATES.

1

ONLY

R3-5L
30"x24"

QTY: 2

10

QTY: 8 (RE-USE
EXISTING)

A

R

Y

G

2 (SUPPLIED
BY CITY)

B

R

Y

G

4 (RE-USE EXISTING)
8 (SUPPLIED BY CITY)

	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
MIN GREEN		5	5	5		5	5	5
EXTENSION		3	2	3		3	2	2
MAX I *		20	10	25		20	15	20
MAX II *		50	10	20		50	15	15
VEH. CLEAR		3		3		3		3
RED CLEAR		2		2		2		2
WALK**		5		5				
ADVANCE WALK**		3		3				
PED CLEAR		13		15				
DYNAMIC MAX		30	15	35		30	20	30
DYNAMIC STEP		5	5	5		5	5	5
RECALL		SOFT				SOFT		
DET. MEMORY		OFF	OFF	OFF		OFF	OFF	OFF
FLASH		Y	BLANK	R		Y	BLANK	R
DUAL ENTRY								ON

SIGNAL TIMING NOTES

1. SIGNAL TO OPERATE ON COLORS AT ALL TIMES
2. FLASH MODE IS FOR EMERGENCIES ONLY.
3. TIMES SHOWN ARE FOR FREE OPERATION ONLY.
4. CONCURRENT PEDESTRIAN WALK PHASES TO BE PROGRAMMED ON RECALL,
NO PEDESTRIAN BUTTONS TO BE INSTALLED.

* MAX II SPECIAL EVENTS PROGRAMS

1. INITIAL SUGGESTED PROGRAM DURING EXITING TRAFFIC TIMES FOR CIVIC CENTER EVENTS.
2. PROGRAM TO BE ADJUSTED IN FIELD TO OPTIMIZE EXITING TRAFFIC OPERATIONS (BY OTHERS).

** CONCURRENT PED PHASES TO START WITH A 3 SECOND ADVANCE WALK PHASE (ALL-RED),
FOLLOWED BY 5 SECOND WALK PHASE AND THEN THE PED CLEARANCE PHASE

LEGEND

PROPOSED 12" STOP BAR

CROSSWALK MARKINGS

VIDEO DETECTION ZONE (RE-USE EXISTING)

SINGLE WHITE LANE LINE MARKING

DOUBLE YELLOW CENTER LINE MARKING

SIGNAL HEAD

EXISTING VIDEO DETECTION

EXISTING GROUND MOUNTED SIGNAL CONTROLLER

EXISTING COUNTDOWN PEDESTRIAN HEAD ASSEMBLY (NO PUSH BUTTON)

PROPOSED 12"x12" ELECTRICAL JUNCTION BOX (ME DOT ITEM 626.11)

RELOCATED 10' ALUMINUM SIGNAL POST AND FOUNDATION

8' ALUMINUM SIGNAL POST AND FOUNDATION (SUPPLIED BY CITY)

EXISTING STEEL MAST ARM TO REMAIN

RELOCATED STEEL MAST ARM

2" SCHEDULE 80 PVC CONDUIT

TRAFFIC SIGN

STRUCTURE TABLE:	LOCATION:
(A) RELOCATE 21'± MAST ARM ON NEW FOUNDATION:	STA: 34+22.34 OFFSET: 28.74 L
(B) RELOCATE 21'± MAST ARM ON NEW FOUNDATION:	STA: 35+12.03 OFFSET: 24.56 L
(C) EXISTING 35'± MAST ARM TO REMAIN:	STA: 35+27.35 OFFSET: 55.87 R
(D) RELOCATE 10' PEDESTAL POLE ON 24" FOUNDATION:	STA: 34+54.63 OFFSET: 44.65 L
(E)RELOCATE 10' PEDESTAL POLE ON 24" FOUNDATION:	STA: 34+91.31 OFFSET: 32.50 R
(F) EXISTING 35' ± MAST ARM TO REMAIN:	STA: 34+25.54 OFFSET: 42.33 R
(G) PROPOSED 8' PEDESTAL POLE ON 18" FOUNDATION (SUPPLIED BY CITY):	STA: 34+24.77 OFFSET: 32.33 R
(H) PROPOSED 8' PEDESTAL POLE ON 18" FOUNDATION (SUPPLIED BY CITY):	STA: 35+28.78 OFFSET: 41.81 L

TYPICAL PHASE SEQUENCE

*DUAL RING OPERATION ON TEMPLE ST.
AND UNION ST.

SEE SHEET 35 OF 35 (TRA-4) FOR NOTES AND FURTHER DETAIL

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REFERENCES:
DESIGNED BY: D. ROMA
DRAWN BY: S.WYMAN
CHECKED BY: J. ADAMS
SCALE: 1"=10'
DATE: APRIL 29, 2015
Civil 3D 2014 Drawing Name: SpringSt_Traffic_2014.dwg

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 0088
Professional Engineer
SEAL

SPRING STREET
RECONSTRUCTION PROJECT
TRAFFIC PLAN

TEMPLE/UNION

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

SEAL OF THE CITY OF PORTLAND, MAINE
OFFICE OF THE CITY ENGINEER

SHEET #
34 OF 35
PLAN NUMBER
TRA-3

GENERAL NOTES:

1. CONTRACTOR TO REMOVE ALL CONFLICTING SIGNS AND MARKINGS.
2. PRIOR TO CONSTRUCTION, EXCAVATIONS, BORINGS, ETC., CONTRACTOR MUST NOTIFY DIGSAFE AND A SITE IDENTIFICATION NUMBER AND DIGSAFE DATE MUST BE OBTAINED.
3. CONTRACTOR TO VERIFY THE LOCATION, DEPTH AND MATERIAL OF ALL SUBSURFACE UTILITIES.
4. CONTRACTOR SHALL MEET ALL UTILITY SERVICE REQUIREMENTS FOR NEW ELECTRICAL SERVICE CONNECTIONS.
5. TRAFFIC SIGNAL WORK SHALL BE COMPLETED IN A MANNER THAT WILL CAUSE MINIMUM DISRUPTION TO TRAFFIC.
6. ANY ITEMS THAT ARE PROPOSED AS EQUAL SHALL BE APPROVED THROUGH THE CITY OF PORTLAND AND MaineDOT.
7. ALL CONDUIT TO BE SCHEDULE 80 PVC, EXCEPT FROM POWER SOURCE TO CONTROLLER CABINET WHICH SHALL BE STEEL.
8. CONTRACTOR TO REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT NOT BEING RE-USED AND SHALL RETURN EQUIPMENT TO THE CITY OF PORTLAND.

SIGNAL NOTES:

1. THE TRAFFIC SIGNAL EQUIPMENT SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE MaineDOT AND THE CITY OF PORTLAND.
2. THE SIGNAL WILL BE EQUIPPED WITH ALL NECESSARY SIGNAL COMMUNICATIONS EQUIPMENT TO BE FULLY FUNCTIONAL AND INTEGRATED IN THE FUTURE WITH THE CITY OF PORTLAND STREETWISE SIGNAL MANAGEMENT SYSTEM.

DETECTION NOTES:

1. INSTALL ONE FLIR THERMAL SENSOR DETECTION ON EACH OF THE THREE INTERSECTION APPROACHES AS DEPICTED ON THE PLANS AND ASSOCIATED EQUIPMENT TO ALLOW FOR VEHICLE PRESENCE DETECTION, TRAFFIC COUNTING AND FUTURE REMOTE VIEWING AND ADJUSTMENT.
2. FLIR THERMAL SENSOR DETECTION SHALL BE INSTALLED AT THE OPTIMAL HEIGHT AND LOCATION WITH APPROPRIATE LENS (WIDE, MEDIUM OR NARROW) ANGLE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER TO ENSURE OPTIMAL PERFORMANCE.

MAST ARM & FOUNDATIONS NOTES:

1. PROPOSED MAST ARMS SHALL BE SUPPLIED BY AND DELIVERED TO THE SITE BY THE CITY TRAFFIC DIVISION.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS STAMPED BY A STRUCTURAL ENGINEER FOR NEW FOUNDATION AND MAST ARMS.
3. CONTRACTOR TO VERIFY EXISTING SOIL CONDITIONS AND PROPERTIES IN VICINITY OF ALL PROPOSED MAST ARMS AND FOUNDATIONS.
4. EXISTING MAST ARMS TO BE RE-PAINTED WITH ANODIZED BLACK PAINT. PAINT TYPE AND COLOR TO BE CONFIRMED WITH CITY TRAFFIC DIVISION PRIOR TO APPLICATION.

SIGNS & MARKINGS NOTES:

1. ALL SIGNS SHALL BE SUPPLIED BY THE CITY TRAFFIC DIVISION AND SHALL BE SUPPLIED WITH WIND LOAD REDUCTION CIRCULAR HOLES.
2. CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION ON SCHEDULE AND DELIVERY OF LANE-USE SIGNS.
3. CITY TRAFFIC DIVISION SHALL DEMOUNT AND REMOUNT STREET NAME SIGNS IF NECESSARY; CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION.

SIGNAL HEADS NOTES:

1. VEHICLE SIGNAL HEAD HOUSING SHALL BE BLACK COLOR AND MCCAIN MODEL MTSTA OR MTSTP SERIES OR APPROVED EQUAL.
2. ALL SIGNAL HEADS SHALL BE 12" DIAMETER LED.
3. ALL SIGNAL HEADS SHALL HAVE 5" LOUVERED BACKPLATES.
4. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH VISORS.
5. PEDESTRIAN SIGNAL INDICATIONS, SIGNS, AND PUSH BUTTONS; INTENT IS TO INSTALL NEW EQUIPMENT SUPPLIED BY THE CITY.

SIGNAL HEAD MOUNTING NOTES:

1. SIGNAL HEADS SHALL BE FIXED MOUNTED TO MAST ARMS WITH ASTRO BRACKETS. SEE NOTE 8 UNDER ITEM 643.71
2. BOTTOM OF SIGNAL HEAD HOUSING SHALL BE A MINIMUM OF 17 FT BUT NOT MORE THAN 19 FT ABOVE THE GRADE AT THE CENTER OF THE ROADWAY.

CABINET AND CONTROLLER NOTES:

1. INSTALL A TRAFFICWARE/NAZTEC MODEL 980-E TS-2 TYPE 1 CONTROLLER WITH ETHERNET PORT IN A NEMA P-44 BASE MOUNTED CABINET WITH A 15" EXTENSION.
2. ALL MAJOR COMPONENTS OF THE CONTROLLER CABINET ASSEMBLY SHALL BE FROM THE SAME MANUFACTURER; INCLUDING CABINET ASSEMBLY, CONTROLLER, MMU, BIU'S, AND CABINET POWER SUPPLY. MMU: TRAFFICWARE/NAZTEC MODEL MMU-516L WITH LCD, KEYPAD AND COMMUNICATIONS PORT; BIU: TRAFFICWARE/NAZTEC MODEL BIU-130; CABINET POWER SUPPLY TRAFFICWARE/NAZTEC MODEL TS2-CAB-PS.

TEMPORARY TRAFFIC CONTROL:

1. CONTRACTOR TO CONFIRM AND COORDINATE WITH CITY TRAFFIC DIVISION ON TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION.
2. CITY TRAFFIC DIVISION WILL MAINTAIN TEMPORARY TRAFFIC CONTROL WITH OPERATIONAL TRAFFIC SIGNAL DURING CONSTRUCTION BY UTILIZING EXISTING PEDESTAL POLES AND MAST ARM UNTIL SWITCH-OVER TO NEW TRAFFIC SIGNAL.

ITEM 643.71 (LS) AT THE INTERSECTION OF SPRING ST. AT HIGH ST. SHALL INCLUDE:

1. 1 - NAZTEC TS2 TYPE 1 SIGNAL CONTROLLER WITH ETHERNET PORT AS SPECIFIED, SUPPLIED BY CONTRACTOR
2. 5 - SIGNAL HEADS - (3 BALL SECTION) - 2 RE-USE ON HIGH STREET NORTHBOUND APPROACH, 3 SUPPLIED BY CITY TRAFFIC DIVISION.
3. 2 - SIGNAL HEADS - (4 SECTION BI-MODAL) - 2 SUPPLIED BY CITY TRAFFIC DIVISION
4. 1 - SIGNAL HEAD - (5 SECTION BI-MODAL) - INDICATION (SECTIONS), SUPPLIED BY CITY AND 5 SECTION SIGNAL HEAD ASSEMBLED BY CONTRACTOR.
5. 2 - MAST ARMS SUPPLIED BY CITY ON NEW FOUNDATIONS.
6. 1 - 10 FT PEDESTAL POLE SUPPLIED BY CITY ON NEW FOUNDATION.
7. 4 - 8 FT PEDESTAL POLES SUPPLIED BY CITY ON NEW FOUNDATION.
8. CITY SHALL SUPPLY ASTRO BRACKETS WITH ALL SUPPLIED SIGNAL HEADS; 6 ANTICIPATED, CONTRACTOR TO CONFIRM WITH CITY TRAFFIC DIVISION.
9. ELECTRICAL SERVICE CONNECTION
10. WIRE INTERSECTION
11. NEW PEDESTRIAN HEADS, PUSH BUTTONS AND SIGNS TO BE SUPPLIED BY THE CITY AND INSTALLED BY THE CONTRACTOR.
12. ALL NECESSARY INCIDENTAL EQUIPMENT AND MATERIALS REQUIRED TO COMPLETE 634.71 WORK.

ITEM 645.271 - REGULATION, WARNING, CONFIRMATION, AND ROUTE SIGNS TYPE 1:

1. SHALL BE SUPPLIED AND DELIVERED TO THE SITE BY THE CITY TRAFFIC DIVISION.
2. CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION APPROPRIATELY ON SCHEDULE AND DELIVERY OF SIGNS.

GENERAL NOTES:

1. CONTRACTOR TO REMOVE ALL CONFLICTING SIGNS AND MARKINGS.
2. PRIOR TO CONSTRUCTION, EXCAVATIONS, BORINGS, ETC., CONTRACTOR MUST NOTIFY DIGSAFE AND A SITE IDENTIFICATION NUMBER AND DIGSAFE DATE MUST BE OBTAINED.
3. CONTRACTOR TO VERIFY THE LOCATION, DEPTH AND MATERIAL OF ALL SUBSURFACE UTILITIES.
4. CONTRACTOR SHALL MEET ALL UTILITY SERVICE REQUIREMENTS FOR NEW ELECTRICAL SERVICE CONNECTIONS.
5. TRAFFIC SIGNAL WORK SHALL BE COMPLETED IN A MANNER THAT WILL CAUSE MINIMUM DISRUPTION TO TRAFFIC.
6. ANY ITEMS THAT ARE PROPOSED AS EQUAL SHALL BE APPROVED THROUGH THE CITY OF PORTLAND AND MaineDOT.
7. ALL CONDUIT TO BE SCHEDULE 80 PVC, EXCEPT FROM POWER SOURCE TO CONTROLLER CABINET WHICH SHALL BE STEEL.
8. CONTRACTOR TO REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT NOT BEING RE-USED AND SHALL RETURN EQUIPMENT TO THE CITY OF PORTLAND.

SIGNAL NOTES:

1. PROPOSED TRAFFIC SIGNAL EQUIPMENT SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE MaineDOT AND THE CITY OF PORTLAND.

DETECTION NOTES:

1. INSTALL ONE FLIR THERMAL SENSOR DETECTION ON EACH OF THE FOUR INTERSECTION APPROACHES AS DEPICTED ON THE PLANS AND ASSOCIATED EQUIPMENT TO ALLOW FOR VEHICLE PRESENCE DETECTION, TRAFFIC COUNTING AND FUTURE REMOTE VIEWING AND ADJUSTMENT.
2. FLIR THERMAL SENSOR DETECTION SHALL BE INSTALLED AT THE OPTIMAL HEIGHT AND LOCATION WITH APPROPRIATE LENS (WIDE, MEDIUM OR NARROW) ANGLE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER TO ENSURE OPTIMAL PERFORMANCE.

MAST ARM & FOUNDATIONS NOTES:

1. CONTRACTOR TO RESET EXISTING MAST ARMS ON NEW FOUNDATION AS NOTED.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS STAMPED BY A STRUCTURAL ENGINEER FOR NEW FOUNDATION DESIGN AND EXISTING MAST ARM ADEQUACY.
3. CONTRACTOR TO VERIFY EXISTING SOIL CONDITIONS AND PROPERTIES IN VICINITY OF ALL PROPOSED MAST ARMS AND FOUNDATIONS.
4. EXISTING MAST ARMS TO BE RE-PAINTED WITH ANODIZED BLACK PAINT. PAINT TYPE AND COLOR TO BE CONFIRMED WITH CITY TRAFFIC DIVISION PRIOR TO APPLICATION.

SIGNS & MARKINGS NOTES:

1. ALL SIGNS SHALL BE SUPPLIED BY THE CITY TRAFFIC DIVISION AND SHALL BE SUPPLIED WITH WIND LOAD REDUCTION CIRCULAR HOLES.
2. CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION ON SCHEDULE AND DELIVERY OF LANE-USE SIGNS.
3. CITY TRAFFIC DIVISION SHALL DEMOUNT AND REMOUNT STREET NAME SIGNS, IF NECESSARY; CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION.

SIGNAL HEADS NOTES:

1. VEHICLE SIGNAL HEAD HOUSING SHALL BE BLACK COLOR AND BE MCCAIN MODEL MTSTA OR MTSTP SERIES OR APPROVED EQUAL.
2. ALL SIGNAL HEADS SHALL BE 12" DIAMETER LED.
3. ALL SIGNAL HEADS SHALL HAVE 5" LOUVERED BACKPLATES.
4. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH VISORS.
5. RE-USE EXISTING PEDESTRIAN SIGNAL INDICATIONS, SIGNS, AND PUSH BUTTON EQUIPMENT.

SIGNAL HEAD MOUNTING NOTES:

- 1.SIGNAL HEADS SHALL BE FIXED MOUNTED TO MAST ARMS WITH ASTRO BRACKETS. SEE NOTE 9 UNDER ITEM 643.71
- 2.BOTTOM OF SIGNAL HEAD HOUSING SHALL BE A MINIMUM OF 17 FT BUT NOT MORE THAN 19 FT ABOVE THE GRADE AT THE CENTER OF THE ROADWAY.

CABINET AND CONTROLLER NOTES:

1. EXISTING CABINET, SIGNAL CONTROLLER AND RELATED COMPONENTS TO REMAIN.
2. CONTRACTOR TO INSPECT CONDITION AND INTEGRITY OF EXISTING CABINET AND CLOSE OR SEAL ANY HOLES OR CRACKS.
3. EXISTING FIELD WIRES (FROM CABINET TO FIELD EQUIPMENT) TO BE REPLACED.

TEMPORARY TRAFFIC CONTROL:

1. CONTRACTOR TO CONFIRM AND COORDINATE WITH CITY TRAFFIC DIVISION ON TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION.
2. INTENT IS TO MAINTAIN TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION WITH STOP SIGNS ON THE CENTER STREET APPROACHES AND IF NECCESARY, STOP SIGNS ON THE SPRING STREET APPROACHES.

ITEM 643.71 (LS) AT THE INTERSECTION OF SPRING ST. AT CENTER ST. SHALL INCLUDE:

1. 6 - SIGNAL HEADS (3-BALL SECTION) - 2 RE-USE EXISTING, 4 NEW SUPPLIED BY CITY.
2. 2 - SIGNAL HEADS (5-SECTION) - SUPPLIED BY CITY
3. RESET (2) EXISTING 21 FT ± MAST ARMS ON NEW FOUNDATION
4. RESET (4) EXISTING 10 FT PEDESTAL POLES ON NEW FOUNDATION
5. RESET (2) EXISTING 8 FT PEDESTAL POLES ON NEW FOUNDATION
6. RELOCATE EXISTING PEDESTRIAN HEAD, PUSH BUTTONS AND SIGNS ON RELOCATED MAST ARMS AND PEDESTAL POLE.
7. WIRE INTERSECTION FROM CABINET TO FIELD EQUIPMENT
8. INSPECT AND REPAIR (SEAL) EXISTING CONTROLLER CABINET, IF NECESSARY
9. CONTRACTOR TO COORDINATE AND CONFIRM WITH CITY TRAFFIC DIVISION ON CONDITION OF ASTRO-BRACKETS, CITY TO SUPPLY NEW ASTRO-BRACKETS SHOULD REPLACEMENT BE WARRANTED; IT IS ANTICIPATED THAT 3 SHALL BE REPLACED.
10. ALL NECESSARY INCIDENTAL EQUIPMENT AND MATERIALS REQUIRED TO COMPLETE 643.71 WORK

ITEM 645.271 - REGULATION, WARNING, CONFIRMATION AND ROUTE SIGNS TYPE-1:

1. SHALL BE SUPPLIED AND DELIVERED TO THE SITE BY THE CITY TRAFFIC DIVISION.
2. CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION APPROPRIATELY ON SCHEDULE AND DELIVERY OF SIGNS

GENERAL NOTES:

1. CONTRACTOR TO REMOVE ALL CONFLICTING SIGNS AND MARKINGS.
2. PRIOR TO CONSTRUCTION, EXCAVATIONS, BORINGS, ETC., CONTRACTOR MUST NOTIFY DIGSAFE AND A SITE IDENTIFICATION NUMBER AND DIGSAFE DATE MUST BE OBTAINED.
3. CONTRACTOR TO VERIFY THE LOCATION, DEPTH AND MATERIAL OF ALL SUBSURFACE UTILITIES.
4. CONTRACTOR SHALL MEET ALL UTILITY SERVICE REQUIREMENTS FOR NEW ELECTRICAL SERVICE CONNECTIONS.
5. TRAFFIC SIGNAL WORK SHALL BE COMPLETED IN A MANNER THAT WILL CAUSE MINIMUM DISRUPTION TO TRAFFIC.
6. ANY ITEMS PROPOSED AS EQUAL SHALL BE APPROVED THROUGH THE CITY OF PORTLAND AND MaineDOT.
7. ALL CONDUIT TO BE SCHEDULE 80 PVC, EXCEPT FROM POWER SOURCE TO CONTROLLER CABINET WHICH SHALL BE STEEL.
8. CONTRACTOR TO REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT NOT BEING RE-USED AND SHALL RETURN EQUIPMENT TO THE CITY OF PORTLAND.

SIGNAL NOTES:

1. THE TRAFFIC SIGNAL EQUIPMENT SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE MaineDOT AND CITY OF PORTLAND.

DETECTION NOTES:

1. THE EXISTING TRAFICON VIP VIDEO DETECTION SYSTEM SHALL BE INSTALLED ON RELOCATED MAST ARMS.
2. TRAFICON VIP VIDEO DETECTION SHALL BE INSTALLED AT THE OPTIMAL HEIGHT AND LOCATION BY THE CONTRACTOR AND APPROVED BY THE ENGINEER TO ENSURE OPTIMAL PERFORMANCE.

MAST ARM & FOUNDATIONS NOTES:

1. CONTRACTOR TO RESET EXISTING MAST ARMS ON NEW FOUNDATION AS NOTED.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS STAMPED BY A STRUCTURAL ENGINEER FOR NEW FOUNDATION DESIGN AND EXISTING MAST ARM ADEQUACY.
3. CONTRACTOR TO VERIFY EXISTING SOIL CONDITIONS AND PROPERTIES IN VICINITY OF ALL PROPOSED MAST ARMS AND FOUNDATIONS.
4. MAST ARMS TO BE RE-PAINTED WITH ANODIZED BLACK PAINT. PAINT TYPE AND COLOR TO BE CONFIRMED WITH CITY TRAFFIC DIVISION PRIOR TO APPLICATION.

SIGNS & MARKINGS NOTES:

1. ALL SIGNS SHALL BE SUPPLIED BY THE CITY TRAFFIC DIVISION AND SHALL BE SUPPLIED WITH WIND LOAD REDUCTION CIRCULAR HOLES.
2. CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION ON SCHEDULE AND DELIVERY OF LANE-USE SIGNS.
3. CITY TRAFFIC DIVISION SHALL DEMOUNT AND REMOUNT STREET NAME SIGNS, IF NECESSARY; CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION.

SIGNAL HEADS NOTES:

1. VEHICLE SIGNAL HEAD HOUSING SHALL BE BLACK COLOR AND MCCAIN MODEL MTSTA OR MTSTP SERIES OR APPROVED EQUAL.
2. ALL SIGNAL HEADS SHALL BE 12" DIAMETER LED.
3. ALL SIGNAL HEADS SHALL HAVE 5" LOUVERED BACKPLATES.
4. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH VISORS.
5. RE-USE EXISTING PEDESTRIAN SIGNAL INDICATION EQUIPMENT, EXCEPT PED PUSH-BUTTONS. PED PUSH-BUTTONS SHALL NOT BE INSTALLED; CONCURRENT PED PHASES SHALL BE SET TO RECALL. NEW SIGNS SHALL BE INSTALLED (SEE DETAIL, SHEET 33 (D-2), OR APPROVED EQUAL.).

SIGNAL HEAD MOUNTING NOTES:

1. SIGNAL HEADS SHALL BE FIXED MOUNTED TO MAST ARMS WITH ASTRO BRACKETS. SEE NOTE 9 UNDER ITEM 643.71.
2. BOTTOM OF SIGNAL HEAD HOUSING SHALL BE A MINIMUM OF 17 FT BUT NOT MORE THAN 19 FT ABOVE THE GRADE AT THE CENTER OF THE ROADWAY.

CABINET AND CONTROLLER NOTES:

1. EXISTING FIELD WIRES (FROM CABINET TO FIELD EQUIPMENT) TO BE REPLACED.

TEMPORARY TRAFFIC CONTROL:

1. CONTRACTOR TO CONFIRM AND COORDINATE WITH CITY TRAFFIC DIVISION ON TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION.
2. INTENT IS TO MAINTAIN TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION WITH STOP SIGNS ON THE CENTER STREET APPROACHES AND IF NECCESARY, STOP SIGNS ON THE SPRING STREET APPROACHES.

ITEM 643.71 (LS) AT THE INTERSECTION OF SPRING ST. AT TEMPLE ST. SHALL INCLUDE:

1. 12 - SIGNAL HEADS (3 BALL SECTION) - 4 RE-USE EXISTING, 8 NEW SUPPLIED BY CITY
2. 2 - SIGNAL HEADS (3 SECTION ARROW) - 2 SUPPLIED BY CITY
3. DEMOUNT AND REMOUNT EXISTING VIDEO DETECTION ON RELOCATED MAST ARMS
4. RESET (2) EXISTING 21 FT ± MAST ARMS ON NEW FOUNDATIONS
5. RESET (2) EXISTING 10 FT. PEDESTAL POLES ON NEW FOUNDATIONS
6. INSTALL (2) 8 FT PEDESTAL POLES SUPPLIED BY CITY ON NEW FOUNDATIONS
7. RELOCATE EXISTING PEDESTRIAN HEADS AND SIGNS ON RELOCATED MAST ARMS AND PEDESTAL POLES. PED BUTTON SHALL NOT BE INSTALLED.
8. WIRE INTERSECTION (FROM CABINET TO FIELD EQUIPMENT)
9. CONTRACTOR TO COORDINATE AND CONFIRM WITH CITY TRAFFIC DIVISION ON CONDITION OF ASTRO-BRACKETS. CITY TO SUPPLY NEW ASTRO-BRACKETS SHOULD REPLACEMENT BE WARRANTED; IT IS ANTICIPATED THAT 4 SHALL BE REPLACED.
10. ALL NECESSARY INCIDENTAL EQUIPMENT AND MATERIALS REQUIRED TO COMPLETE 643.71 WORK.

ITEM 645.271 - REGULATION, WARNING, CONFIRMATION AND ROUTE SIGNS TYPE 1:

1. SHALL BE SUPPLIED AND DELIVERED TO THE SITE BY THE CITY TRAFFIC DIVISION.
2. CONTRACTOR TO COORDINATE WITH CITY TRAFFIC DIVISION APPROPRIATELY ON SCHEDULE AND DELIVERY OF SIGNS



100 Commercial Street
Suite 417
Portland, Maine 04101
(207) 541-9544 Fax (207) 541-9548
www.miloneandmacbroom.com

REFERENCES:

Civil 3D 2014 Drawing Name:
SpringSt_Traffic_2014.dwg

DESIGNED BY:

D. ROMA

DRAWN BY:

S.WYMAN

CHECKED BY:

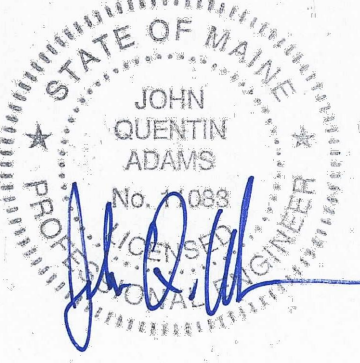
J.ADAMS

SCALE:

1"=20'

DATE:

APRIL 29, 2015



SPRING STREET
RECONSTRUCTION PROJECT
TRAFFIC PLAN
TEMPLE/UNION

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #

35

OF

35

PLAN NUMBER

TRA-4